



THE POWER OF ART

FOR OUR PARENTS

James Warren Ingalls
Flora Salvador Ingalls
Henry L. Lewis
and Joan Lewis
who first opened our eyes to the power of art



Richard Lewis

MARIST COLLEGE

Susan I. Lewis
STATE UNIVERSITY OF NEW YORK AT NEW PALTZ





The Power of Art, Second Edition

Richard Lewis Susan I. Lewis

Publisher: Clark Baxter

Senior Development Editor: Sharon Adams Poore

Assistant Editor: Erikka Adams Editorial Assistant: Nell Pepper

Managing Technology Project Manager:

Wendy Constantine

Executive Marketing Manager: Diane Wenckebach

Marketing Assistant: Aimee Lewis

Lead Marketing Communications Manager:

Heather Baxley

Senior Production Manager: Michael Burggren Senior Content Project Manager: Lauren Wheelock

© 2009, 1995 Thomson Wadsworth, a part of The Thomson Corporation. Thomson, the Star logo, and Wadsworth are trademarks used herein under license.

ALL RIGHTS RESERVED. No part of this work covered by the copyright hereon may be reproduced or used in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, Web distribution, information storage and retrieval systems, or in any other manner—without the written permission of the publisher.

Printed in the United States of America

1 2 3 4 5 6 7 11 10 09 08

Library of Congress Control Number: 2007935155

Student Edition:

ISBN-13: 978-0-534-64103-0 ISBN-10: 0-534-64103-2 Senior Art Directors: Cate Rickard Barr and Maria Epes

Print Buyer: Becky Cross
Permissions Editor: Tim Sisler

Production Service: Lachina Publishing Services

Text Designer: Lee Anne Dollison Photo Researcher: Sarah Evertson Cover Designer: tani hasegawa

Cover Image: Art Resource, NY. Katsushika Hokusai (1760-1849). *The Great Wave of Kanagawa*. From the series

"36 Views of Fuji." Color woodblock print.

Cover/Text Printer: Quebecor World - Versailles

Compositor: Lachina Publishing Services

Thomson Higher Education 10 Davis Drive Belmont, CA 94002-3098 USA

For more information about our products, contact us at:
Thomson Learning Academic Resource Center
1-800-423-0563

For permission to use material from this text or product, submit a request online at http://www.thomsonrights.com.

Any additional questions about permissions can be submitted by e-mail to thomsonrights@thomson.com.

© 2009 Thomson Learning, Inc. All Rights Reserved.

Thomson Learning WebTutorTM is a trademark of

Thomson Learning, Inc.

ecently, while finishing the second edition of The Power of Art, we visited the Museum of Modern Art in New York City. As we walked through its galleries, filled with brilliant works of art, we saw a crowd gathered in front of a relatively small picture, towards one side of a long wall. Moving closer, we could see people crowded in front of a world famous masterpiece—Vincent van Gogh's Starry Night (17-30). Many appeared overwhelmed, though smiling. Young and old had difficulty leaving the spot where they were standing. Newcomers to the crowd experienced a sudden jolt of recognition. At times, strangers turned to each other and just nodded happily. Some even had tears running down their cheeks. Listening in, we heard many accents and many languages. One comment we overheard seemed to represent everyone's thoughts (as well as the title of this book)—"No matter how many times I see it, I never get over it."

People all over the globe are drawn to art for just such an experience. Museum attendance is at an all-time high. At Italy's Accademia Gallery in Florence, crowds of people line up for hours in the hot Tuscan sun for the opportunity to enter the museum. Once inside, one can hear viewers gasp in pleasure as they have their first look at Michelangelo's *David* (14-16). Similar reactions can be observed in Tokyo, Cairo, Melbourne, and Moscow.

Today, we and the art world are in the midst of both a Digital and Global Age. In the first edition of this book, we called the contemporary chapter A Storm of Images. The title is even more apt now. Since the arrival of the World Wide Web in the mid-1990s, the storm has become a virtual monsoon. But this deluge of imagery makes the need for a book like this even more important. How can a newcomer to art sift through the vast amount of art available online, on television, in magazines, and in books, much less than in the many art fairs, galleries and museums around the world? An internet search for a picture of the Mona Lisa will yield not only the famous masterpiece at www.louvre.fr, but a half-million other results. These include parodies, cartoons, posters, movies, recordings, a typeface, a condominium unit, and someone's dog. A search for background information on the painting will only be more confounding; a list of four-million choices from sites around the world will arrive in seconds.

To reflect these changes, The Power of Art has evolved to help students sort through the art of the past and today. A new chapter on the Principles of Design will help students understand the underlying principles behind all visual art. The Digital Arts are now featured in a separate chapter on New Media, with concrete explanations of the newest tools for artists. Global coverage has expanded with the presentation of many more individual nonwestern artists, particularly those from Asia and the Americas, along with added cultural and historical context. Discussion of contemporary issues has been, of course, updated and is now integrated throughout the book. Many images by twenty-first century artists in a wide range of media have been added. As befits an up-to-date book on art, almost every image is in color.

Yet we hope much of what made the first edition successful remains. We continue to believe that an art appreciation textbook is not meant to impress scholars with the erudition of its authors, but to inspire in its readers a lifelong love of art. Our goal, as before, has been to write a clear, concise, coherent, yet enjoyable book that educates by pleasure.

Since the first edition of the book was published, we have tested it on art appreciation classes of our own. We learned that students not only found the text accessible, but that they shared it (and especially the pictures) with their family, friends, and coworkers. Questions like "What is art?," "Should art be beautiful?," and "Who is your favorite artist?" have come alive for our students and thousands of others. These students, who often began by feeling confused, and even a little defensive, as they embarked on their academic exposure to the visual arts, quickly gained confidence and enthusiasm. Visits to galleries and museums became meaningful in new ways. Not that the students approved of everything about the original edition! Their critiques have been taken into account and, we trust, helped make this edition even better.

We are fortunate to live in an age of superb color reproductions, but it is worth remembering that no matter how well this book introduces one to the world of the visual arts, no matter how beautiful are the color images on its pages, nothing can replace being in the presence of the original. Books and websites, videos and magazines, are just starting places to

begin one's appreciation of art. *The Power of Art* was designed only to open the door to a rich new world to be discovered and enjoyed for a lifetime.

We hope that the readers of this edition will find themselves one day, like the crowd in front of Van Gogh's *Starry Night*, smiling and a little short of breath in front of one of the many masterpieces that are our global heritage of art.

ACKNOWLEDGEMENTS

This book is the product of years of teaching—our own as well as that we received as students. We would like to acknowledge the excellence, dedication, and influence of Abe Ajay, Rudolf Arnheim, George Bayliss, Antonio Frasconi, Al Hinton, Gerome Kamrowski, Al Mullen, and Leonard Stokes, as well as Paul Berry, Dorothea Fisher, Eugenia Janis, Kenworth Moffet, and Clara Tucker. The following colleagues at Marist College, Scuola Lorenzo de Medici, and SUNY New Paltz were especially supportive during this revision of *The Power of Art*: Artin Arslanian, Fabrizio Guarducci, Guy Lometti, Dennis Murray, Steven Poskanzer, and John Ritschdorff.

As we revised the manuscript, many friends and colleagues offered advice, inspiration, perceptive comments and analysis that aided us immensely. We are indebted to Lorenzo Casamenti, Donise English, Kit French, Thomas Goldpaugh, David Krikun, James Luciana, Michele Rowe-Shields, Steve Vinson, and Beth Wilson.

We were also encouraged by enthusiastic readers among younger friends like Sarah and Amy Gross, Hannah Shreefter, Alison Oldehoff, and Elizabeth Moskowitz; and older art aficionados like Belle Bennett, Marjorie Brockman, Dr. Jay Levine, Edward Lewis, Ruth Page, Abby Schlossberg, and Scott Skodnek.

In developing the second edition, we responded to the recommendations of the many instructors who used the first one. We would like to thank in particular the following reviewers whose perceptive comments and analysis were extremely helpful in the preparation of this book:

William P. Andrews, Mississippi State University; Steven Bule, Utah Valley State College; Alisia G. Chase, SUNY Brockport; Patricia Cosper, University of Alabama at Birmingham; Michel Demanche, University of Maryland; Andree Flageolle, Pittsburg State University; Paul Greco, Collin County Community College; Soo Y. Kang, Chicago State

University; Pamela A. Lee, Washington State University; Lynn Mackenzie, College of DuPage; Daniel Mason, North Hennepin Community College; Susan P. McKiernan, University of Akron; Anita L. Monsebroten, University of North Dakota; Richard Scott Parker, Tarrant County College; Barbara G. Pogue, Essex County College; Scott Robinson, North Central Texas College; Carey C. Rote, Texas A&M University-Corpus Christi; L. Dennis Sears, Gadsden State Community College; William Hunter Stamps, University of Central Arkansas; Steve D. Stones, Weber State University; Derrick White, Tyler Junior College; Jessie L. Whitehead, Southern Connecticut State University; and Linda Woodward, Montgomery College.

Like the art world, the publishing world is in the midst of both a Digital and Global Age, too. The way this text was produced reflects these important changes. The publishing team for Wadsworth was not located in an office building, but was spread across the United States and worked with sources all over the world. Despite the distances, we always felt a part of a talented and dedicated team. We want to thank our publisher, Clark Baxter, who contributed good spirits and his keen judgment to the entire project; our acquisitions editor, John Swanson, whose faith in this book and persistence made the second edition possible; our development editor, Sharon Adams Poore, who managed to be both the voice of reason and faith in the long process of revision and production; our project manager, Lauren Wheelock, who kept a steady hand on the steering wheel during the obstacle course that is publishing today; our production manager, Sheila McGill, who calmly managed the complicated production process; and our superb and ingenious photo researcher, Sarah Evertson, who constantly surprised us with her ability to find the most challenging images. We also want to thank Julie Iannacchino, the development project manager on the web and digital image library; Erikka Adams, the assistant editor for the supplements; Nell Pepper, our talented editorial assistant; Lois Walsh, for her invaluable and timely efforts on the supplements; and Diane Wenckebach, our enthusiastic and very nice executive marketing manager.

Finally, we would like to thank our students, many of whom sent us links and brought us articles and catalogs, but more importantly, who showed us the way to create a book that could transmit the power of art. The enthusiastic love for art of Erich Alejandro, Nicholas Baish, Joe Chiellini, Joe Concra, Rich Dachtera, Matt Daly, Stefanie DeRario, Kim

Dowd, Jessica Friedlander, Ryan Khoury, Jonathan Kiselik, Heather Krumm, Kevin McKiernan, Mike Milano, Joe Molloy, Danielle Morrison, Caitlin O'Hare, Matthew O'Neill, Christopher Perry, David Restiano, Richard Santiago, Nik Sardos, Joe Ventura, and many more students like them, is what encouraged us in the many years it took to bring this text to completion.

Last, but certainly not least, we would like to express love and appreciation to our son, Rob, for putting up with constantly busy parents and a really messy house for the past two years. Some day, we hope you will think it was worth it.

Richard and Susan Lewis

INSTRUCTOR RESOURCES

PowerLecture

This all-in-one presentation tool makes it easy to incorporate high-resolution digital images into your lectures. You can assemble, edit, and present customized lectures with the **Digital Image Library** that provides high-resolution images—maps, diagrams, and most of the fine art images from the text. A zoom feature enables you to magnify selected portions of an image for more detailed display in class. PowerLecture also includes a comparison-and-contrast feature, PowerPoint lecture outlines, an Instructor's Manual and ExamView computerized testing.

JoinIn Student Response System

Turn your lecture into a personal, interactive experience for your students. These text-specific slides are created for use with JoinInTM software for classroom personal response systems ("clickers").

STUDENT RESOURCES

ArtExperience Online

This interactive website gives students access to useful technology resources that reinforce and complement topics in the textbook. ArtExperience Online features **flashcards** of images from the text, video demonstrations of studio art techniques, interactive exercises that explore the foundations of art, project ideas, and more.

SlideGuide

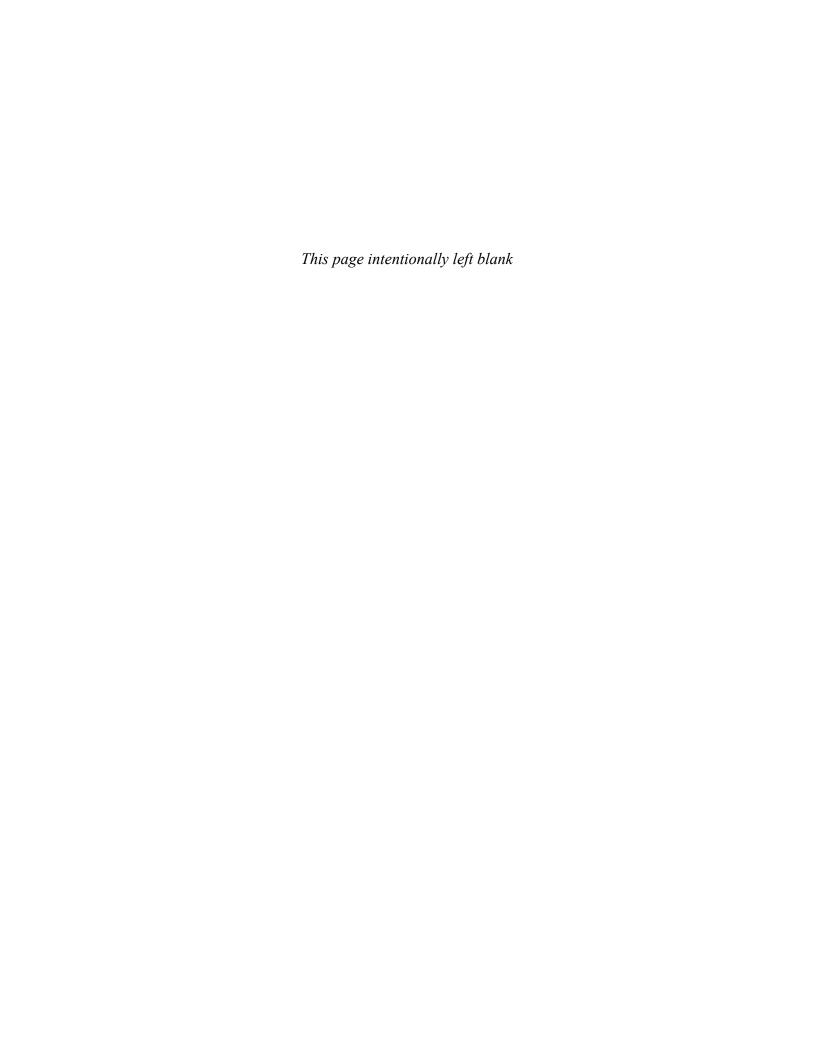
Help students study with this note-taking organizer that contains reproductions of the images from the book with captions and page numbers and space to take notes in class.

ArtBasics: An Illustrated Glossary and Timeline

Full-color images and high-quality line art make this brief introduction to the basic terms, styles, and time periods an excellent reference for beginning students.

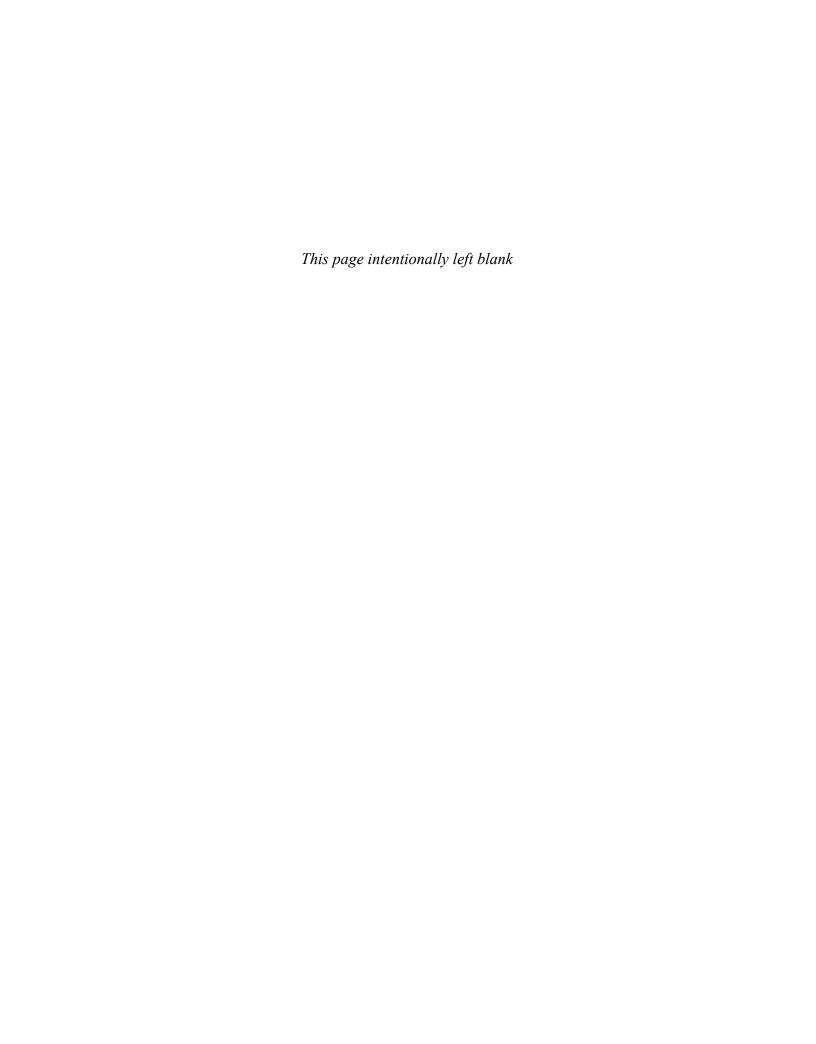
Museum Experience Handbooks

Available by regions; East, Southeast, Southwest, West, and Midwest, these handbooks provide students with information about museum going and museums in their area.



CONTENTS IN BRIEF

Preface	ν	PART	
PART		A Global Heritage	
The Language of Art		CHAPTER 12 ANCIENT EMPIRES, ANCIENT GODS	208
CHAPTER I THE POWER OF ART	2	CHAPTER 13 THE AGE OF FAITH	238
CHAPTER 2 THE PRIMARY ELEMENTS	38	CHAPTER 14 THE RENAISSANCE	268
The Artist's Materials and Tools		CHAPTER 15 DRAMA AND LIGHT: MANNERISM, THE BAROQUE, AND ROCOCO	302
and ioois		PART	
CHAPTER 3 THE PRINCIPLES OF DESIGN	56	The Modern Era	
CHAPTER 4 Drawing	76	CHAPTER 16 THE BATTLE OF THE ISMS: NEOCLASSICISM, ROMANTICISM,	
CHAPTER 5 PAINTING	88	AND REALISM CHAPTER 17	338
CHAPTER 6 Printmaking	100	OUT OF THE STUDIO AND INTO THE LIGHT: IMPRESSIONISM AND	
CHAPTER 7 PHOTOGRAPHY	114	POSTIMPRESSIONISM CHAPTER 18	364
CHAPTER 8 NEW MEDIA: TIME AND DIGITAL ARTS	128	THE REAL WORLD ON TRIAL: THE EARLY TWENTIETH CENTURY	390
CHAPTER 9 SCULPTURE	146	CHAPTER 19 THE INVISIBLE MADE VISIBLE: ABSTRACT AND NONREPRESENTATIONAL ART	418
CHAPTER 10 ARCHITECTURE	162	CHAPTER 20	110
CHAPTER II DECORATIVE ARTS, CRAFTS,		A STORM OF IMAGES: ART IN THE CONTEMPORARY WORLD	440
AND DESIGN	186	Glossary Photo Credits Index	475 487 499



CONTENTS

Preface	ν	CHAPTER 2	20
		THE PRIMARY ELEMENTS	38
D.A. D. T.		Space	38
PART		Line	39
The Language of Art		Shape	40
1110		The Spirit of the Forms	43
CHAPTER I		Light, Shadow, and Value	44
THE POWER OF ART	2	Texture	46
Looking at Art	3	Color	48
Learning How To See	3	Describing Color Color Wheel	48 48
ART NEWS:		ART NEWS:	40
The Mona Lisa has Been Stolen!	3	Augustus: In Living Color!	50
Methods and Materials	4	The Science of Color	52
Placing Art and Artist in Historical Context	4	Naturalistic versus Arbitrary Color	54
Art and Culture	5	Emotional Resonance	54
The Powers of Art: Bringing Faith to Life	7		
Prehistoric Art and Magical Powers	8		
The Power of Art for Tribal Peoples	10	PART	
A GLOBAL VIEW: Journeys to the Spirit Worlds	11	The Austica's Massaciale	
The Power of Religious Art	12	The Artist's Materials	
Art Represents Ideals	14	and Tools	
Art as a Declaration of Power	14	and 10013	
The Power to Convey Immortality	15	CHAPTER 3	
The Power to Change Our Beliefs	16	THE PRINCIPLES OF DESIGN	56
The Power to Shock	16		
The Power to Touch Our Emotions	17	Placement	57
ART NEWS:		Balance	58 59
Controversy Over the Vietnam Memorial	18	Symmetry and Asymmetry	60
The Power to Awaken Our Senses	19	Emphasis Unity and Variety	62
The Power to Transform the Ordinary The Power of Art for the Artist	21 23	Proportion and Scale	63
	23 24	ART NEWS:	00
Self-Expression The Artist at Play	24	Scale on Trial: The Tilted Arc Controversy	68
The Artist's Memory	25	Designing and Organizing Space with Depth	70
Defining Art	26	Linear Perspective	73
Folk Art	27	A Modern Way of Seeing: Cubism	
Craft and Decorative Art	28	and Nonperspective Space	74
Design	28	CHARTER 4	
Art Is Beauty	31	CHAPTER 4	7/
Art Is Originality and Creativity	32	DRAWING	76
Ways to Understand Art	33	Graphite	77
The Artist and the Art	34	ART NEWS:	
Art and Art History When We Know More, We See More	35 36	The Lost Drawings of Michelangelo	78
Beginning the Journey	36	Charcoal	80
Degining the Journey	30	Chalk and Pastel	80

Crayon	82	CHAPTER 8	
Pen and Ink	83	NEW MEDIA:	
Brush and Ink	84	TIME AND DIGITAL ARTS	128
Wash	85	Time as an Artist's Medium	129
Contemporary Approaches to Drawing	85	Moving Pictures	130
CHARTER		Video Art	131
CHAPTER 5	0.0	The Artist and the Computer	133
PAINTING	88	The Pioneers of Digital Art	134
Encaustic	88	The Digital Studio	136
Fresco	90	Hardware	136
Tempera Panel	90	The Digital Media	137
Oil Painting	91	Image Editing	137
Watercolor and Gouache	94	Graphic and Type Design	138
Acrylic	95	Digital Video	138
Contemporary Approaches		Digital Animation	140
to Painting Mixed Media	96	A GLOBAL VIEW:	4.46
A GLOBAL VIEW:		Japanese Anime	140
Tibetan Sand Painting	97	Internet Interactive	142 144
Shaped Canvases	98	Interactive	144
Unique Materials	98	CHAPTER 9	
CHARTER /		SCULPTURE	146
CHAPTER 6	1.00		
PRINTMAKING	100	Relief Sculpture	147
Relief Printmaking	101	Sculpture in the Round	148
Woodcut	101	Kinetic Sculpture	148
Wood Engraving	103	Performance Art	150
Intaglio Printmaking	103	Installations	151
Metal Engraving	104	Earthworks	152
Etching	106	A GLOBAL VIEW:	154
Aquatint	107	Eighth-Century Earth Artists Sculptural Methods	155
Lithography	107	Modeling	155
ART ISSUES: What's the Difference between		Casting	155
a Print and a Poster?	109	Wood Carving	157
Silkscreen	111	Stone Carving	158
Unique Prints	112	Modern Sculptural Methods:	
Contemporary Approaches	112	Constructing and Assembling	159
Contemporary Approaches		Contemporary Approaches	160
CHAPTER 7		Mixed Media	160
PHOTOGRAPHY	114		
Technique and Development	114	CHAPTER 10	
The Camera	114	ARCHITECTURE	162
Styles of Photography	117	The Art of Architecture	162
Straight Photography	117	The Architect as Artist and Engineer: Planning	162
Beyond Reproduction: Fine Art Photography	120	Harmony of Exterior and Interior Design	164
Photomontage	121	Harmony with Natural Setting	165
ART ISSUES:		Art To Be Lived In	166
Can Art Be Obscene?	123	A GLOBAL VIEW:	4.75
Contemporary Approaches	125	The Wonders of the World	167
		The Parthenon The Greek Orders	169 170
		The Oteck Olders	1/0

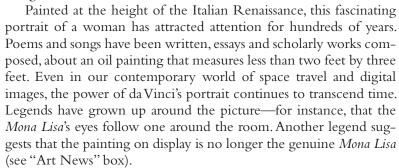
Materials and Methods	171	A GLOBAL VIEW:	
Earth, Clay, and Brick	171	A World Mountain for Worship	221
Stone	172	Classical Greek Sculpture	223
Wood	174	A GLOBAL VIEW:	
Iron and Glass	176	Fertility Goddesses	225
Steel and Glass	176	Hellenistic Greece	226
Reinforced Concrete	177	The Classical World: Rome	228
Computer-Aided Architectural Design	178	Imperial Rome	230
Architecture Is a Product of Its Time		Roman Architecture	230
and the Past	179	Organized Conquerors	231
Saint Peter's	180	Roman Temples	233
Monticello	182	Roman Painting and Mosaics	235
Urban Planning	183	The Decline of Rome	236
Contemporary Approaches	184		
Contomporary Approaches		CHAPTER 13	
CHAPTER II		THE AGE OF FAITH	238
DECORATIVE ARTS, CRAFTS,			
	107	Religious Images or Sacrilege?	241
and design	186	Early Christian and Byzantine Art	244
The Craft Media	187	The Early Middle Ages	248
Ceramics	187	A GLOBAL VIEW:	
Glass	189	A World Apart: Mesoamerica	250
A GLOBAL VIEW:		Islam	252
Japanese Aesthetics: The Tea Ceremony		Buddhism	254
and the Zen Garden	190	Hinduism	255
Metalwork	192	The Middle Ages	257
Fiber Arts	193	The Romanesque Style	257
Wood	195	The Gothic Style	261
The Studio Crafts Movement	196	ART NEWS:	
Contemporary Approaches in Crafts	200	The Dimming of National Treasures	264
Design	202	Medieval Art in Italy	265
Graphic Design	202		
Industrial Design	203	CHAPTER 14	
Interior Design	204	THE RENAISSANCE	268
Landscape Design	206	The Idea of the Renaissance	270
		Early Renaissance Sculpture	2,0
		and Architecture	271
PART		Donatello	273
			2/3
A Global Heritage		Early Renaissance Painting:	274
7 (010001 1 101 1000		Mastering Perspective	274
CHAPTER 12		A Love of Learning and Grazia	274
ANCIENT EMPIRES,		Leonardo da Vinci	276
	200	ART NEWS:	077
ANCIENT GODS	208	The Birth of Modern Anatomy	277
The First Civilizations	209	The High Renaissance	279
Egypt	210	Michelangelo	280
ART NEWS:		ART ISSUES:	
Preserving the Past: A Race Against Time	210	The Cost of Restoration: The Sistine Chapel	201
Ancient China	217	and the Last Supper	284
The Classical World: Greece	218	Raphael	287
The Classical Age	219	The Renaissance in Venice	288
0		Palladio and Architecture	289

The End of the High Renaissance in Italy The Beginning of the Northern Renaissance Art in the Courts of the Duke of Burgundy Jan van Eyck Albrecht Dürer A GLOBAL VIEW: The Gold of the New World Hans Holbein and the Protestant Reformation Northern Renaissance: The Darker Side Genre: Scenes from Ordinary Life	290 291 291 293 293 295 296 297 300	A GLOBAL VIEW: Orientalism American Romanticism: The Hudson River School Realism:Art and Politics ART NEWS: Rosa Bonheur Wears Pants! Neoclassicism and Romanticism Merge in Academic Art	354 357 358 361 362
CHAPTER 15 DRAMA AND LIGHT: MANNERISM, THE BAROQUE, AND ROCOCO Mannerism The Counter-Reformation and Tintoretto The Baroque Period El Greco Caravaggio and Naturalism Artemisia Gentileschi: The Spread of Tenebroso Bernini A GLOBAL VIEW: Mexican Baroque Baroque Naturalism in Spain: Velázquez The Baroque Period in the North Rubens The Dutch Republic ART NEWS: Judith Leyster Rediscovered Rembrandt The Baroque in France Louis XIV and Versailles The Rococo in France: The Aristocracy at Play	302 303 304 306 306 308 310 311 315 317 318 318 322 325 326 328 331 334	CHAPTER 17 OUT OF THE STUDIO AND INTO THE LIGHT: IMPRESSIONISM AND POSTIMPRESSIONISM The Salons and Academic Art Impressionism The Salon des Refuses and Manet Out of the Studio and into the Light Monet, the Pure Impressionist Monet in Giverny Renoir Morisot Degas and Cassatt ART NEWS: Artist vs. Critic Rodin's Touch The Postimpressionists Toulouse-Lautrec Seurat and Pointillism Gauguin and the Search for Paradise Van Gogh: Father of Expressionism A GLOBAL VIEW: Japonisme: Pictures of the Floating World Cézanne's Revolution	364 368 368 369 370 371 373 374 375 376 379 380 381 382 383
PART	IV	CHAPTER 18	
The Modern Era		THE REAL WORLD ON TRIAL: THE EARLY TWENTIETH CENTURY	390
CHAPTER 16 THE BATTLE OF THE ISMS: NEOCLASSICISM, ROMANTICISM, AND REALISM The Enlightenment English Art Becomes Respectable: Reynolds Thomas Gainsborough Neoclassicism David and the French Revolution Canova and Neoclassical Sculpture Romanticism Goya and the Romantic Reaction The Birth of Romanticism	338 339 339 341 341 342 344 346 346 347	The Birth of a New Century Munch: "Inner Pictures of the Soul" German Expressionism Fauvism Matisse Picasso and Cubism A GLOBAL VIEW: The Living Art of Africa Abstracting Sculpture: Brancusi "All Things are Rapidly Changing": Futurism and Speed Modern Warfare for a Modern World: World War I	391 392 393 395 396 397 398 404 405 406
The English Landscape and Romanticism Romanticism and Politics in France Ingres and Late Neoclassicism	347 348 349 351	Dada: To One Madness We Oppose Another Marcel Duchamp and International Dada ART NEWS:	407 407
The French Art World Divided	352	Modern Art Invades America: The Armory Show	408

The New Objectivity Surrealism Surrealist Juxtaposition	410 413 414	CHAPTER 20 A STORM OF IMAGES: ART IN THE CONTEMPORARY WORLD	440
Dalí Magritte:The Real World on Trial	414 415	Alternatives to Abstract Expressionism: Rauschenberg and Johns	442
CHAPTER 19		Pop Art	443
THE INVISIBLE MADEVISIBLE:		Venturi: Pop Architecture	446
ABSTRACT AND		The End of Art: Minimalism	447
	410	Expanding Minimalism	448
NONREPRESENTATIONAL ART	418	Return of Representation: Superrealism	449
Crossing the Frontier	418	Architecture: Breaking Down Barriers	450
The Spiritual Path to Nonrepresentation	419	ART ISSUES:	
Mondrian: A Logical Approach		Pilgrimages for a New Age	452
to Nonrepresentation	421	Going Beyond the Art World	454
De Stijl	422	Making Room for Women: Judy Chicago	455
The International Style	423	Changing the Nature of the Gallery Space:	
Le Corbusier: Master of the "New Spirit"		Performance Art	457
in Architecture	424	ART ISSUES:	
Frank Lloyd Wright	425	Why Isn't a Woman's Place in the Museum?	458
Abstract Art in America: O'Keeffe	426	The Art World Becomes Global:	
Straight Photography	428	Postmodern Art and the New Image	461
The Center of Western Art Shifts	428	New Approaches to Autobiography	462
ART NEWS:		Postmodern Architecture	464
The War Against Modern Art: Degenerate Art	429	Contemporary Nonrepresentation	466
Abstract Expressionism:		Contemporary Installations	468
Modern Art Created in America	430	New Electronic Media	468
Pollock's Action Painting	430	Global Art World	470
Color-Field Painting	433		
Teacher to the Next Generation	434	Glossary	475
The New York School	435	Photo Ĉredits	487
Nonrepresentational Sculpture	436	Index	499
Architecture: The Glass Box	437	2,,,,,,,,	.,,
Organic Abstraction	438		
The Challenge of Nonrepresentational Art	439		

The Power of Art

mong the treasures of the Louvre Museum in Paris is probably the best known work of art in the Western world, Leonardo da Vinci's *Mona Lisa* (I-I). Signs are posted throughout the vast museum, marking the way to its most famous masterpiece. In the gallery where it hangs, there are other paintings by some of the most talented artists in history, but viewers surround only one, jostling each other to get better views. Tourists treat the painting like a famous landmark, posing for their pictures beside it. Guards are always nearby, and a wooden barrier keeps viewers at a distance. Deep within a massive case of bulletproof glass that dwarfs the small painting, the same elegant woman who has captivated generations of art lovers regards them with her inscrutable smile.



What is it about this painting that has elevated it, not simply to the height of a masterpiece but to the symbolic pinnacle of Western art? How can a work of art become so valuable that it is seen as priceless? What gives the Mona Lisa its power over people from different centuries and cultures? Although many people have spoken of the air of mystery that surrounds the picture of the woman with the haunting smile, on first viewing it is common to find the picture a disappointment. The glass makes it difficult to see, and what we see is not exactly what Leonardo painted. The art historian Kenneth Clark described the Mona Lisa as "the submarine goddess of the Louvre," a phrase that accurately reflects the dominant greenish tone of the painting as well as its aquarium-like casing. Yet the earliest known description of the portrait raves about the warmth of the colors, the rosy nostrils and red lips, as well as the overall tone of the face that "seemed not to be colored but to be living flesh." Not only has the color faded, but also at some point in its history the painting was made smaller, probably to fit into a frame, slicing off a pair of columns that once surrounded her.



I-I Leonardo da Vinci, *Mona Lisa*, c. 1503–1505. Oil on wood, approximately $30'' \times 21''$. Louvre, Paris.

LOOKING AT ART

Learning How To See

Despite these ravages of time, it is possible to consider what makes the *Mona Lisa* a masterpiece. Whatever the type of art in question, the first step in learning to appreciate art is simply learning to *look*. This is more challenging than is usually believed. Often we think of looking as a passive act, as in watching TV or clicking through pictures on a webpage. But studying the visual arts requires more than empty viewing; seeing can be *active* rather than passive. When primitive people looked at the world, they

had to *observe* nature because they were hunters and gatherers; they depended on their eyes for survival. In their world everything was natural and real; very little was made by man. We, on the other hand, live among literally millions of images, not only in books or on a screen but also on almost everything we touch—from cereal boxes to printed T-shirts. As opposed to primitive cultures, most of what we see and interact with is human-made. This constant bombardment by printed, video, and digital images has made us visually sophisticated, but can also leave our eyes numb.

Artists often say that someone can really "see" as if most people cannot. What an artist means by **seeing**

RT NEWS

The Mona Lisa has Been Stolen!

he Mona Lisa was actually stolen from the Louvre in 1911, causing a national scandal. While the complete story will never be known, it is believed that the theft was an attempt not only to sell the Mona Lisa but also many forged copies. The forger's plan was that upon the shocking announcement of the painting's theft, unscrupulous wealthy collectors around the world could be easily duped into buying his forgeries of the masterpiece.

The forger contacted a former employee of the Louvre, Vincenzo Peruggia, to arrange the theft. Peruggia and his accomplices, dressed as staff, entered the museum as it closed Sunday afternoon, August 20, 1911. The museum would not open again until Tuesday. The thieves slept overnight in the museum. Early the next morning,



1-2 French officials examine the *Mona Lisa* after its return.

they carried the painting through the many galleries, planning to tell anyone who saw them that they were bringing the *Mona Lisa* to the staff photography lab. The only one who did see them was a plumber, who helped them open a stuck exit door.

No one knew the painting was missing until the next day, and it took two years for it to reappear in Italy. Vincenzo Peruggia had tried to sell it and was turned over to the authorities. At the trial, the thief, who was born in Italy, claimed that he had stolen Leonardo's masterpiece to return it to its rightful place in his own country. A sympathetic Italian jury sentenced Peruggia to only a few months in jail. After the trial, the *Mona Lisa* was displayed briefly in Florence (where Leonardo had begun it in 1503) and then was returned to its home in the Louvre (**I-2**).

is hard to explain, but it is something like the totally involved gaze of a newborn child, hungrily looking at everything as if it had never been seen before, not blinded by preconceptions. All of us like to see new things, but in the midst of a busy life our seeing becomes stale, our eyes jaded. Art can renew the pleasure of seeing and help us feel more alive. Many people have had the exhilarating experience after leaving a museum of noticing that the world outside looks much more interesting and beautiful.

Let's return to the *Mona Lisa* and look at her carefully. First, the image is beautiful. It is not simply that this is the portrait of a beautiful woman—in fact, *La Gioconda* (Lisa del Giocondo) looks less than ideal to contemporary eyes. Although it is safe to assume that she was considered attractive by the standards of the sixteenth century, Leonardo did not give her face (see detail, 1-3) the same perfect beauty he gave to his drawings of angels, for example. But what makes a work of art famous is less the quality of the subject than the way it is interpreted by the artist. The *Mona Lisa* is beautifully and gracefully painted. Viewers are attracted to da Vinci's work through the power of his skill as a draftsman and painter and his remarkable ability to bring his subject to life.



1-3 Detail of figure 1-1: face of Mona Lisa.

This lifelike quality made the *Mona Lisa* famous in its own time. According to the painter Giorgio Vasari, Leonardo's contemporary:

Altogether this picture was painted in a manner to make the most confident artists—no matter who—despair and lose heart . . . in this painting of Leonardo's there was a smile so pleasing that it seemed divine rather than human; and those who saw it were amazed to find that it was as alive as the original.

As Vasari recognized, the *Mona Lisa* revolutionized the art of portraiture, adding movement and life in a way never seen before.

Methods and Materials

Leonardo wrote in his notebooks, "moderated light will add charm to every face," as anyone who has been with a date in a candle-lit restaurant knows. Leonardo used oil paint to recreate this effect, which he called **sfumato lighting** (in Italian, "the soft mist of a fountain"), a soft light that dissolved edges and made details unclear. The *Mona Lisa*'s eyes and mouth were bathed in sfumato light by Leonardo because he knew those are the two most important areas we look at on a face. Because they are left unclear, our imagination fills them in; the lips seem to move and give the *Mona Lisa* life. So it is Leonardo's use of sfumato lighting that is responsible for the legends surrounding this painting—her inscrutable smile, the eyes that look at you and then away.

Leonardo generated a sense of movement in another way. Notice how the background (1-4) does not line up on either side of the *Mona Lisa*'s shoulders. This was intentional—Leonardo wanted to create the illusion that his subject is shifting her shoulder while we are looking at her. Leonardo understood how people *see*, perhaps better than anyone who had ever lived, and he used this knowledge in subtle ways to create the illusion that his *Mona Lisa* was a real person. In fact, this is how viewers have always responded to her.

Placing Art and Artist in Historical Context

Great art reveals the spirit of the age that produced it. Therefore, we need to know when and who made a work of art so we can begin to consider how this affected its form. The grace and beauty of Leonardo's *Mona Lisa*, for example, reflects the value placed on these qualities during the Italian Renaissance.



1-4 Detail of figure 1-1: background of Mona Lisa.

She also illustrates the highly prized attribute of aloofness—what the Italians called *sprezzatura*, a kind of aristocratic refinement and calm.

The life of Leonardo da Vinci represents many other Renaissance values as well. Leonardo was an independent thinker, a scientific observer of nature, an imaginative inventor, and a delightful conversationalist, as well as a talented artist. He filled many notebooks (1-5) with his observations, drawings, poems, and philosophical theories. Above all, he exemplifies a crucial Renaissance idea credited with giving birth to the modern age—*individualism*. Renaissance thinkers conceived of human beings as potentially godlike creatures with immense physical, intellectual, and creative powers. Part of the mystique of Leonardo's art is that it was done by one of the first individuals to be considered a creative genius in the modern sense.

No one can really be sure why Leonardo painted this portrait of twenty-four-year-old Lisa del Giocondo, the wife of an important Florentine merchant, at the same time the artist was refusing paid commissions from more notable persons. We do know that Leonardo worked on the *Mona Lisa* for decades and never considered it finished. Because he reworked the image over and over, carrying it with him on his travels, the painting must have exerted the same endless fascination over the artist as it has over its viewers. Leonardo died in France, the guest of King Francis I (who moved his mother and sisters out of a chateau so da Vinci could take up residence there), so the *Mona Lisa* became part of the royal art collection. That is



1-5 Leonardo da Vinci, *Drawing of Flowers and Diagrams*. Study from the notebooks, c. 1490–1519. Pen and ink.

how it came to be in the Louvre Museum in Paris, and why it eventually became identified as not only a part of Italian culture but French culture as well.

Art and Culture

Western cultures are not the only ones to see works of art as priceless. The Japanese, for example, have an elaborate system of rating works of art and their value to national heritage. The most valuable artworks are designated as Japanese National Treasures, while other significant works of art are categorized as Important Cultural Properties. Because of their historic and aesthetic importance, National Treasures (ranging from huge statues and painted screens to fragile decorated boxes and ceramic vessels, such as teacups) cannot be sold or taken out of the country. In Japan, even people—such as the most famous and accomplished living artists—can be given the official title of National Treasure.

One of the works of art designated as a Japanese National Treasure is the wooden statue of the Amida Buddha (the Buddha of the West, I-6), carved by the sculptor Jocho in the eleventh century. This statue is part of an entire sculptured environment, a grouping of many gilded wooden figures that decorate the central hall of a Buddhist temple designed for an aristocratic family of the period. Because of their great age and the high quality of their design and carving, all of the figures in this sculptural group qualify as National Treasures—considered as valuable to Japanese heritage as the Statue of Liberty is to Americans.

Even if we know little about Buddhism, we can be impressed by the elaborate carving and huge scale of this sculptural group. The *Amida Buddha* on his throne is almost twelve feet high, and the music-making angels that hang on the walls number in the dozens. One is also impressed by the excellent

preservation of statues that will soon be a thousand years old. But imagine how powerful this vision of paradise must have seemed to the followers of the Pure Land Buddhist sect, who believed that when they died, their God would descend and lead their souls to a blissful paradise. It is this very descent, the floating of the Amida to earth, and the celestial paradise of dancing and music–making angels, that Jocho brought to life in the Phoenix Hall.

Just as the *Mona Lisa* reflects the ideals of Renaissance Italy, this Japanese sculptural group reflects the taste and beliefs of the world in which it was created. Eleventh-century Japan was dominated by a ruling class that valued elegance and courtly manners above all. The Amida cult appealed particularly to the upper classes because its promised paradise resembled a continuation of the luxurious life of beauty and ease they knew on earth. The Buddha, as seen by Jocho, is as refined and aloof as a prince who



1-6 Interior of the Ho-o-do or Phoenix Hall, 1053. Byodo-in Temple at Uji, Japan.

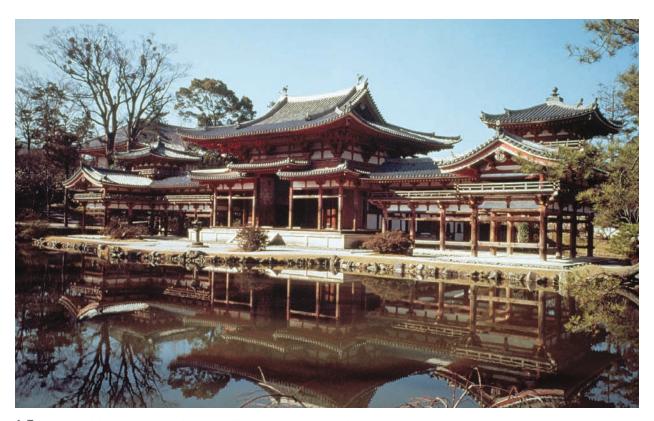
looks down graciously at his worshippers; the dancing angels are like so many well-bred royal attendants. The slimness and delicacy of the carvings, the richness of the shimmering gold with which they were painted (now somewhat worn), were perfectly in tune with both the subject they represented and the patrons for whom they were made. Yet even today, in a completely changed world, embracing different religious beliefs, brought up in a different culture, we can appreciate the skill and genius that make Jocho's sculptural grouping a great work of art.

The setting for the *Amida Buddha* and dancing celestial angels is a fitting one, and its architecture reflects the same beliefs and taste as the decorated interior. The Buddha is housed within the Ho-odo, or Phoenix Hall (I-7). Note how the delicate elegance of the celestial vision within the hall is echoed by the shape of the entire wooden structure. With its open, airy side pavilions spread out like the wings of a bird, and its roof corners pointed upward, the whole temple appears to be about to lift up off the ground. The impression of hovering weightlessness is enhanced by its mirrored reflection in a pond. Once again, the message of immortality and courtly beauty are merged in both the form and function of this thousand-year-old building. While great Euro-

pean structures—like the Louvre Palace that houses the *Mona Lisa*—are almost always made of stone, the lighter quality of wood greatly influences our aesthetic experience of the Phoenix Hall and its interior decoration.

THE POWERS OF ART: BRINGING FAITH TO LIFE

Through art, the deepest and most intangible beliefs of a culture can be translated into powerful images that communicate specific spiritual messages to the people who view them as part of their religious rituals. From the beginning of humanity, people have expressed their beliefs in material form. They pictured their gods and goddesses in statues and paintings; they built places for worship and religious rites. The Amida Buddha is an excellent example of how art brings religious beliefs to life. In some periods, such as the Middle Ages in the Western world, most art was religious in character. So much visual art is related to human beliefs and rituals of worship that it would be easy to fill an entire library with books exploring the relationship between art and faith in different cultures.



1-7 Exterior of the Ho-o-do or Phoenix Hall, 1053. Byodo-in Temple at Uji, Japan.

Prehistoric Art and Magical Powers

Art need not be as beautiful as the Mona Lisa or as elegant and sophisticated as Japanese sculpture to be considered great art. Some of the most powerful art ever made was done more than ten thousand years ago by the prehistoric hunting tribes who inhabited Europe before and during the last Ice Age. One of the very earliest known artworks of this period is a tiny (4-1/8 inch) carved stone figurine known as the Venus of Willendorf (1-8): Venus because it is obviously female, Willendorf after the town in Austria where it was found. Although its exact purpose and meaning remain shrouded in the mists of time, scholars have surmised that this female fertility figure was used as some kind of magical charm. With her exaggerated breasts, belly, and buttocks, this faceless Stone-Age Venus provides a powerful visual image of the lifegiving earth mother. Such fertility symbols were repeated in many different materials and locations throughout Europe and were probably connected with rituals that associated human fertility with the survival of the Ice-Age clan or tribe. For the Stone-Age people who made and used them, these were not works of art in the same sense we understand the term. These amulets were made to be touched, held, carried, stroked, and worshipped—not to be viewed as beautiful objects in a glass cabinet, or admired as the works of individual artists.

The earliest known paintings (I-9) were also creations of European hunting peoples, but they date from a period ten to fifteen thousand years later than early sculptures. Popularly known as cave paintings, these dramatic prehistoric pictures were done by Ice-Age tribes living in areas of what is now France and Spain around 15,000 BC. When the decorated caves at Lascaux, France, were discovered (accidentally in 1940 by some boys looking for an underground entrance to an old chateau), they caused a sensation throughout the worlds of history, archeology, and art. On these rocky walls, viewers can gaze back at the handiwork of peoples whose culture remains shrouded in mystery. Entering into the eerie, dark caves, viewers find pictures of huge Ice-Age beasts. The primary subjects of these early cave paintings are animals—most often bulls, horses, and bison, sometimes mammoths and woolly rhinoceroses. Humans were rarely shown. The depiction of these wild animals was not simplified or awkward; the cave paintings do not resemble the art of children. They are naturalistic, because the animals were drawn in motion, as if they were alive. Even without

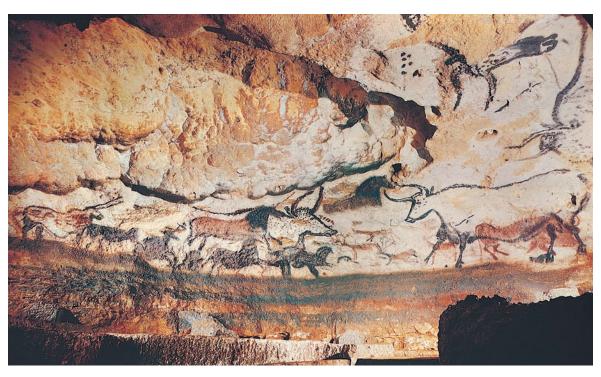


1-8 Venus of Willendorf, c. 30,000–25,000 BCE. Limestone, 41/8" high. Naturhistorisches Museum, Vienna.

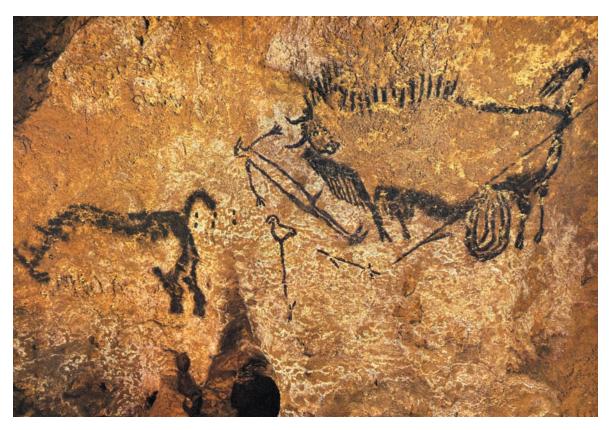
photographic details, contemporary viewers have no problem telling that one form is a horse, another a bull (I-I0).

Were these images meant as records of successful hunts, or were they part of magical rituals meant to ensure success for future hunting parties? We cannot be absolutely sure of their purpose, but the most common explanation for the cave paintings is that they were used by their creators in magical rites. It is certainly unlikely that these pictures were simply decoration for people's living quarters. Most are painted in dark, difficult to reach parts of the caves, portions that show no archeological evidence of having been lived in. We do know that the artists came to these special caves to paint on scaffolds by the light of oil lamps; remnants of the lamps and their palettes, along with the holes for their scaffolds, have been found. After the paintings were completed, the caves and their images seem to have been used in ceremonies for thousands of years.





1-9 Hall of the Bulls (left wall), Lascaux, c. 13,000 BCE. Dordogne, France.



1-10 Well Scene, Lascaux, c. 13,000 BCE. Bison 55" high. Dordogne, France.



I-II Mask (Kanaga). Dogon, Mali, twentieth century. Wood, polychrome, fiber, 43 1/16" high. Gift of James M. Osbarn for the Linton Collection of African Art. Yale University Art Gallery, New Haven. CT.

The Power of Art for Tribal Peoples

Painting and carving in rock walls, known as **rock art**, was not simply a prehistoric European phenomenon. Rock art can be found in North America, Asia, Australia, and all across Africa. These sites reveal that art played a vital role in the rituals of tribal peoples for tens of thousands of years. In fact, this role remained uninterrupted until well into the twentieth century. Not only does African rock art depict long-extinct animals, but it also includes images of European colonists and their wagons alongside tribal hunters.

Tribal art is the art of any area of the world where people lived or still live in a preindustrial or preagricultural state—generally without permanent buildings, written language, or modern technology. Such art is what art historians once called primitive art and was originally considered crude and uncivilized by Western Europeans and Americans who came in contact with the "undeveloped" cultures that produced it. But at the turn of the nineteenth century, their attitude changed. Tribal art was seen as new and exotic, valued by collectors and artists for its immediacy and impact. More recently there has been an attempt to appreciate and understand the arts of tribal peoples living around the world as an expression of the cultures and beliefs that produced them.

For instance, African masks have been popular with European and American art collectors for more than a century and had a dramatic impact on the development of modern art. In Western museums, these sculptural masks are usually displayed as isolated art objects (I-II), hung in tasteful arrangements on



I-I2 Dogon ceremony, Mali.

white gallery walls. Because of their strong sense of design, masks exhibited even in this static way retain their visual power, but the power of their original meaning has been lost. Within the culture and religion for which they were created, masks convey a variety of complex messages that are unknown to most museum viewers and are often obscure even to the collectors who purchase them. The mask is

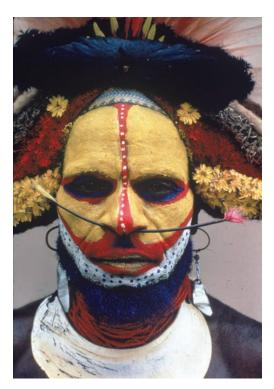
meant to be worn in association with an elaborate costume, during ceremonies where traditional songs and dances are performed (I-I2). Within these ceremonies, which can last for several days, the masks have magical functions. For instance, some masks are supposed to transmit the spirits of the gods or ancestors they represent to the dancers, enabling them to dance for hours (see box).

GLOBAL VIEW Journeys to the Spirit Worlds

Ithough it is not possible to travel back in time to research the mythology of early humans, we can look at the beliefs of tribal societies today. For example, the Eskimos of the Arctic Circle live in an incredibly harsh environment, surrounded by many natural dangers. According to their beliefs, everything—animate beings like animals and inanimate objects like stones—has a spirit. These spirits can be contacted by a *shaman*, or magician/priest. Eskimos believe in an undersea kingdom of supernatural beings as well as a heavenly realm. Their gods include both helpful and destructive spirits, such as the kindly spirit of icebergs and the goddess Sedna, who controls all marine life. Shamans, besides acting as spiritual advisers and doctors to the community, intercede in times of trouble on behalf of the community with the spirits who control the Eskimo world. Illustrated here is a shaman's mask (I-I3), most likely a report of a shaman's spiritual adventure. The face at the center represents the shaman's soul. Eskimo peoples believe that these souls can fly around the world and even the universe. Shaman stories often tell of flying to distant lands, the moon, and the Land of the Dead.



1-13 Eskimo mask depicting the spirit flight of a shaman, Alaska. Wood, metal, and paint.



1-14 Face painting, Huli tribesman, from the Southern Highlands Province, Papua, New Guinea.

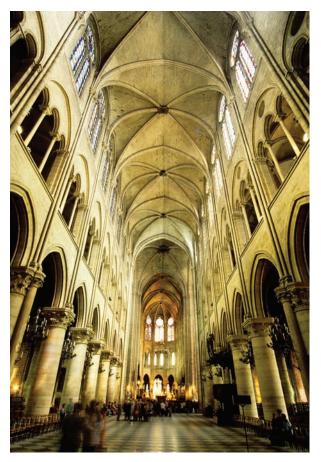
The peoples of New Guinea, in the South Pacific, still create elaborate costumes that include face and body painting (I-I4). Like African masks, these self-decorations are part of ceremonies that have magical implications for the people who participate in them. Costumes include both headdresses and "aprons"; the traditional dances require that both headdress and apron sway in time to the music. If viewers see the dance and decorations as pleasing—if the plumes are shiny, the furs glossy, the face paint bright—they are pleased. But if the dance is poorly done and the decorations are second rate—the feathers and face seem dull and dusty, for instance—it is considered a sign of very bad luck, of coming troubles, even death.

The magical powers attributed to art by prehistoric peoples and "primitive" tribes are not generally accepted in our modern scientific and industrialized world. Still, even if we do not believe that works of art can cure sickness, placate dead spirits, assist us in predicting and controlling the future, or put us in direct touch with supernatural forces, we are not totally immune to the magical power in art. Imagine how you would feel if you discovered someone had poked holes in a photograph of your grandmother's face. Would you calmly reflect that it was only a damaged piece of paper? Or would you consider it an unjustifiable attack on a dearly loved person?

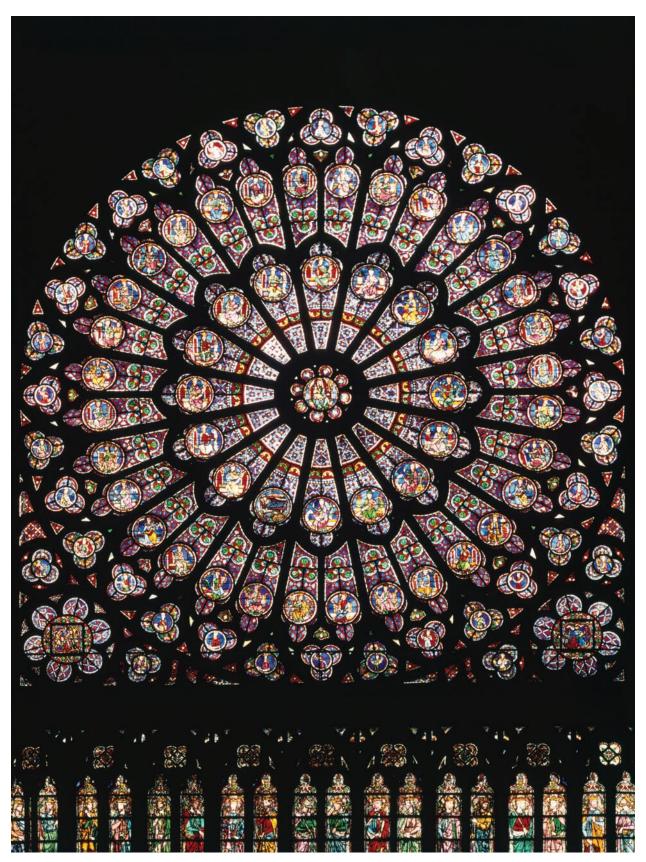
The Power of Religious Art

Religious art gives visual expression to inner belief and has the ability to raise people's spirits above the problems of daily life. For centuries, humans have created special places to worship with art. Such temples or churches are designed to convey particular religious messages and spiritual values. These places of devotion often share some of the magical quality of prehistoric caves. Both magical and religious art express human belief in a spiritual world. Magical art, however, supposes that images have a living power, while religious art is more often simply the visual expression of an inner belief.

Just as the Phoenix Hall (1-6) embodies the beliefs of Japanese Buddhism, the Gothic cathedral of *Notre Dame* (1-15) in Paris is a visual expression of the Christian faith of the medieval era. With its soaring vertical lines, the cathedral seems to lift the soul heavenward, toward God. Its stained glass windows tell biblical stories (1-16); its paintings and statues can instruct and even inspire the viewer. By transforming a material



1-15 Looking up into the nave vaults of Notre Dame Cathedral, Paris, begun 1163, modified 1225–1250.



1-16 Jean de Chelles, rose window of the north transept, Notre Dame Cathedral, Paris, 1240–1250. Stained glass, iron, and lead stone-bar tracery, diameter 43'.

as dense and heavy as stone into a structure of such grace, the cathedral becomes a visual representation of the Christian belief in a spiritual existence beyond and above the limitations of physical reality. This heavenly realm is visually symbolized as the viewer's eye is drawn up the soaring lines of the gothic arches to the very top of the pointed vaults and into a space bathed in colored light. Within *Notre Dame* cathedral, we can experience the power of art to transform the physical act of viewing into the spiritual act of worshipping.

ART REPRESENTS IDEALS

Statues of gods and goddesses also have the power to express the ideals of a particular culture in physical form. The art of classical Greece, for example, expresses the Greeks' cultural ideals of physical beauty and athletic strength, as in the statue *Hermes with the Infant Dionysus* by the great sculptor Praxiteles (I-I7). For the Greeks, a strong and healthy body was extremely



1-17 Roman copy of Praxiteles, *Hermes with the Infant Dionysus* (detail), from Olympia, c. 340 BCE. (?). Marble, approximately 7' high. Archeological Museum, Olympia.

important, because physical development was considered equally as important as mental and spiritual growth. They sought a perfect balance between body and mind, a natural harmony between muscular prowess, grace, mental vigor, and physical beauty.

Greek art also aspired to another balance—between realism and idealism. Greek statues are immediately recognizable as lifelike, accurate representations of the human form. Yet, as in the figure of *Hermes* illustrated here, they idealize the human body, making it more graceful and perfect than any real person could be. Greek sculptures are not portraits of individuals but ideal types. The Western conception of great art as a fusion of the real, or truthful, with the ideal, or beautiful, is descended from the aesthetics of ancient Greece. This philosophy was expressed succinctly by the English Romantic poet John Keats in these famous lines from *Ode on a Grecian Urn*:

Beauty is truth, truth beauty—that is all Ye know on earth, and all ye need to know.

Art as a Declaration of Power

Besides expressing spiritual beliefs or cultural ideals, art from the earliest times has been used to declare the power of rulers. The pharaohs of Egypt erected huge structures to declare their strength; Roman emperors constructed triumphal arches in conquered territories. For thousands of years, artists served kings and queens. During the Renaissance, royal images were not just stylized versions of majesty (as seen in Egypt) but true portraits. One of the finest of the Renaissance court painters was Hans Holbein the Younger, and our image of Henry VIII (1-18) is forever that of an enormous, insatiable powerhouse because of Holbein's portraits. His Henry VIII stands before us seeming larger than life, almost bursting the edges of the picture frame. He is dressed in stunning garments, made of the finest materials sewn with golden embroidery and jewels. Another Holbein portrait (now lost) hung over the king's throne and according to visitors "abashed and annihilated" them when they stood before it. That was the purpose of all the king's portraits—to glorify a man who had supreme power.

Renato Bertelli's *Head of Mussolini* (1-19) is a modern approach to paying tribute to a ruler—in this case, Benito Mussolini, the Fascist dictator who led Italy during World War II. Bertelli's sculpture is infused with the spirit of *Futurism*, a movement that celebrated progress and called on Italians to embrace



1-18 Hans Holbein the Younger, *Henry VIII*, 1540. Oil on panel, $32\frac{1}{2}$ " \times 12 $\frac{1}{2}$ ". Galleria Nazionale d'Arte Antica, Rome.



1-19 Renato Bertelli, *Head of Mussolini* (Continuous Profile), 1933. Painted terracotta, 19" tall. Imperial War Museum, London.

a fresh approach to art, unencumbered by the past. The Futurists called for art "enriched by a new beauty: the beauty of speed" (see Chapter 18). By rotating Mussolini's profile in 360 degrees, Bertelli's "continuous profile" is meant to show the dynamism and modernity of *Il Duce*—"the Leader."

Mussolini's rise to power in the 1920s was greeted with joy by Bertelli and his fellow Futurists. In return, the Italian dictator embraced Futurism's ideals and made it the official style of his regime. This sculpture was approved by the dictator, who ordered its mass production and distribution.

The Power to Convey Immortality

Unlike Henry VIII or Mussolini, Jahangir, the emperor of India who ruled during the height of the Mughal dynasty in the 1600s, directed his artists to portray him as honestly as they could. Yet Jahangir did not totally renounce flattery. While the faces are

naturalistic in the painting Jahangir Preferring a Sufi Shaikh to Kings (1-20), the setting and events are not. The Emperor Jahangir is the source of a brilliant light, too bright even for one of the cupids. Great men have come to pay homage to Jahangir: a wise old saint (who the emperor places above all other admirers), the Sultan of the Ottoman Empire, King James I of England, and the artist Bichitr himself.

The Emperor Jahangir sits on a throne supported by an hourglass whose sand has almost run out. Yet, on the glass, cupids are painting a prayer that he might live for a thousand years. What could resolve this contradiction? It must be the act of painting itself, one of the great passions of the cultured emperor. There were many signs of Jahangir's special love during his reign. One of the greatest royal patrons of arts in history, he provided studios in the palace for his court artists and gave them the finest and most expensive materials to work with. The artists rewarded him with immortality.



1-20 Bichitr, *Jahangir Preferring a Sufi Shaikh to Kings*, from the Leningrad Album, Mughal, India, early seventeenth century. Color and gold on paper, 10%" high. Freer Gallery of Art, Smithsonian Institution, Washington, D.C. F1942.15a.

The Power to Change Our Beliefs

Art also has the power to change the way we think, the way we understand the world around us. Many contemporary artists use their work to express political viewpoints, to lead their viewers to a moral lesson. In The Liberation of Aunt Jemima (I-21), Betye Saar comments on the stereotyping of African-American women in advertising and the media. Saar creates her work by incorporating so-called found objects, like the mammy doll and cutout pictures of Aunt Jemima from pancake packages. These are arranged inside a box as if the artist were creating a diorama; the doll holds a broom in one hand, and a small print of another happy mammy holding a wailing white baby is propped up in front of her. But the familiarity and friendliness of these images is radicalized by the incorporation of a black power fist in the foreground of the box, as well as a rifle and pistol. Here Aunt Jemima seems to express some of the anger

Saar felt, but never expressed, when she experienced discrimination as a young black woman growing up in California. (For instance, Saar won several prizes for her designs for floats in the Tournament of Roses parade before the judges realized she was an African-American. After her race was disclosed, she was given only honorable mentions.) By using real mementos of contemporary culture like the advertising imagery of Aunt Jemima, Saar creates a visual satire that shows how photographic reproductions tend to reinforce racial stereotypes in our society.

The Power to Shock

Related to art's power to change our point of view is its power to shock us. In the early twentieth century, many artists wanted to create works that would wake viewers up and shake them out of their preconceptions about art. One such artist was Marcel



1-21 Betye Saar, *The Liberation of Aunt Jemima*, 1972. Mixed media, $11^3/4'' \times 2^3/4''$. University Art Museum, University of California at Berkeley (purchased with funds from the National Endowment for the Arts). Photograph courtesy of Michael Rosenfeld Gallery, LLC, New York, NY. Photograph by Joshua Nefsky.

Duchamp, and one of his most disturbing pictures was L.H.O.O.Q. (1-22), a satire of Leonardo da Vinci's Mona Lisa. Duchamp chose to make fun of the Mona Lisa, especially because it was so beloved and had become almost like a sacred image to people who cared about art. What he did was take a postcard reproduction of the painting, added a moustache, beard, and dark pupils in pencil, and then printed a few initials at the bottom. When pronounced in French, these initials sound out the vulgar phrase, "she has a hot ass."

Duchamp's parody was upsetting on several levels. First, he was making light of Leonardo's great masterpiece. Because the *Mona Lisa* had come to symbolize the best in Western art, he was symbolically rejecting centuries of tradition. Second, Duchamp was taking a reproduction of a painting by another artist, changing it slightly, and claiming that it was a new work of art that belonged to him—that is, he seemed to be stealing someone else's creative work and then (figuratively) spitting on it. A beautiful image was made ugly, even silly. A picture that had come to symbolize the mystery and ideal nature of all women was turned into a joke. Worst of all, he was suggesting that the *Mona Lisa* was "hot stuff."

The creation of artworks *meant* to upset the viewing public is a recent development in the history of art. In earlier times, the purpose of art was to please the person who commissioned and paid for it—the patron.

The Power to Touch Our Emotions

Art can also profoundly touch the emotions of the viewer. The Vietnam Veterans Memorial (1-23) in Washington, D.C., was designed especially to reach out to the American people and assist in healing the wounds left by the Vietnam War. The architecture student who designed it, Maya Ying Lin, called her concept "a visual poem." When asked what effect the memorial would have on the public, she thought to herself, "They'll cry" (although she didn't say this out loud until after the project was finished). And visitors do cry at the wall, even those who did not personally know any of the soldiers whose names are listed among the dead and missing in action. No one can doubt that the Vietnam Veterans Memorial is the most moving monument on the mall in Washington, D.C., and perhaps the most moving war memorial ever built. What makes it so effective?

The memorial interacts with the site in a unique and powerful way. Instead of building a structure on top of the land, Maya Lin cut into it and edged the



1-22 Marcel Duchamp, *L.H.O.O.Q.*, 1919. Pencil on print, $7\frac{3}{4}'' \times 4\frac{3}{4}''$. Private collection.

slice with a V-shaped black granite wall—one arm pointing toward the Washington Monument, the other toward the Lincoln Memorial. Into this wall more than fifty-five thousand names of all Americans who died during the Vietnam War or remain missing are incised in date order, as if on a mass gravestone. The black granite is polished to reflect its surroundings: the sky, clouds, trees, and land, as well as each person who has come to remember (see box).

The Vietnam memorial is the most popular site on the Mall in Washington, with nearly four million visitors visiting it each year. Many are looking for the names of specific loved ones; others are there simply to pay tribute to all of those who lost their lives. From the first, visitors have interacted with the memorial in unique ways. People reach up to touch the names and make rubbings to carry home as souvenirs. Others leave flowers, photographs, letters, and memorabilia. The memorial is a place for surviving veterans to be reunited with friends, for friends to remember the classmates who never returned, for family members to "meet" the dead father, brother, sister, or cousin who they do not remember, or perhaps never met. Lin's memorial seems to allow



1-23 Maya Ying Lin, *Vietnam Veterans Memorial*, Washington, D.C., 1981–1983. Marble, each wing 246' long.

ART NEWS

Controversy Over the Vietnam Memorial

The Vietnam Veterans Memorial was commissioned in the 1980s by the Vietnam Veterans Memorial Fund (VVMF), founded by an independent group of Vietnam veterans. Because money was raised by donations from people throughout the country, and the site on the mall in Washington, D.C., was contributed by the government of the United States, the patrons for this monument included all Vietnam veterans and in some sense all the citizens of the country. The choice of the design was given to a jury of prominent artists, who looked at more than fourteen hundred entries (all reviewed anonymously, so the judges would not be influenced by the name or reputation of the artist). Surprisingly, their unanimous choice was the submission of a young architecture student, Maya Ying Lin.

Although the selection generated little negative comment at first, problems began to develop as the ground-breaking ceremony neared. Many Americans expected a realistic monument like ones seen in parks and town greens around the United States and were shocked by a design that was highly abstract. Some veterans and prominent contributors united to mount a political campaign against the monument, which was described as a "black gash of shame." A lively, and even bitter, debate developed in the press and the halls of Congress. The official patrons—the VVMF—began to fear that the memorial would never be built at all. In the end, the detractors of Lin's winning entry managed to block government approval for a building permit unless the memorial included a realistic statue (1-24) and a flag.

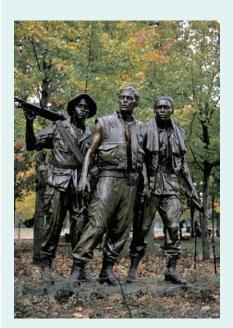
Maya Lin was disillusioned by the pressure for these additions, which she felt would ruin the simplicity of her design and compromise the purity of the site. However, although she was the artist, because the patrons had purchased her design, she had no further control over it. Interestingly, Lin compared the addition of a traditional statue to her monument with the disrespectful way Duchamp treated

ART NEWS

the *Mona Lisa* in *L.H.O.O.Q.*: "I can't see how anyone of integrity can go around drawing mustaches on other people's portraits," she said. To her, to place a realistic statue in the center of the wall would be a mustache, a desecration of her work. She described the statue as "trite." Frederick Hart, the sculptor of the realistic statue, showed as little respect for her memorial design, comparing it to a "blank canvas," claiming that it was "intentionally not meaningful" and "contemptuous of life."

Eventually a compromise was reached; the statue was erected in an entrance plaza a little distance away from the wall, not in front of it. For her design, Maya Lin had won \$20,000 and national fame; she had also experienced criticism, rejection, and a loss of control over her own work. Frederick Hart, a professional sculptor, was paid ten times as much for his statue.

The erection of Hart's statue did not end the controversy over "The Wall's" abstract nature, however. Since then other veterans groups have lobbied for representation at the site. In 1993, a statue honoring the service of women in the Vietnam



War was added. It depicts three women in uniform, one a nurse caring for a wounded soldier. Recently, after another long battle, plans were approved for a large underground Vietnam Wall Memorial Center, designed to provide pictures and films to put the war in historical context.

Despite the continuing public debate, the memorial has become one of the most popular attractions in the nation's capital. In the process, it has more than satisfied the original goals of its patrons, which were to list the name of every soldier lost in Vietnam, to honor those who fought there, to make no political statement for or against the war, and to promote reconciliation.

1-24 Frederick Hart, *Statue for Vietnam Veterans Memorial*, Washington, D.C., 1984. Bronze, life-size.

people to experience their loss, while comforting them at the same time. The *Vietnam Veterans Memorial* is a superb example of the power of art (even when very abstract) to reach out to the public.

The Power to Awaken Our Senses

Contemporary life is lived at a fast pace, and it is easy to miss what is going on around us, to have our senses dulled by overstimulation, and to literally lose focus. The great Russian writer Leo Tolstoy warned us of this danger, when he wrote "In the name of God, stop

a moment, cease your work, look around you." Art has the power to awaken us to realities that we may not have recognized before, to truly open our eyes. In the modern world, the art of photography has become a medium for this kind of artistic revelation—to slow us down, to make us stop and really look.

Ansel Adams hoped his pictures would reveal eternal truths. His majestic landscape *Clearing Winter Storm* (**1-25**) is a superb example of the images that speak to the richness of nature or what Adams called "an austere and blazing poetry of the real." Adams was born in San Francisco and experienced

1-25 Ansel Adams, *Clearing Winter Storm*, Yosemite National Park, 1944. Photograph.





1-26 Imogen Cunningham, *Leaf Pattern*, before 1929. Gelatin silver print. © 1978 The Imogen Cunningham Trust.

its famous and terrible earthquake in the early 1900s. A weak student, he found meaning in his life when he first began hiking in Yosemite as a teenager, carrying one of the early Kodak cameras. He would explore that wilderness into his eighties and become its foremost photographer. Throughout his life, he

was not only an artist, but also an important spokesperson for the environment and a leader of the Sierra Club. His images of Yosemite were meant to not only open our eyes, but also to convince us of the importance of preserving the wilderness in this great park. The rich range of tones and textures in *Clearing Winter Storm* testify to his technical mastery (he was the author of ten books on photography techniques). But his skills in the darkroom were always in the service of his vision—the spirituality, beauty, and grandeur of the natural world.

Photographic art also has the power to concentrate our vision, to focus on reality in a new way. Imogen Cunningham was a photographer who spent much of her career exploring the abstract patterns created by natural forms such as plants. Where Adams is interested in immortalizing an entire scene, Cunningham focuses on a close-up detail of her subject (1-26). By presenting just a leaf or a flower in sharp focus, her pictures almost seem to increase our vision, to enable us to see their subjects with a kind of superrealism. In this way, her pictures appear to stop time, reminding us of these lines by the English poet William Blake:

To see a World in a Grain of Sand And a Heaven in a Wild Flower; Hold Infinity in the palm of your hand And Eternity in an hour.

1-27 Zhan Wang, *Urban Landscape*, 2003. Stainless steel, garden rocks, pots, pans, eating utensils, and mirror. Hayward Gallery, © the artist 2006. Photo by Stephen White, Pekin Fine Arts Co. Ltd.



Cunningham's photographs act as powerful reminders that the smallest aspect of nature reflects an infinity of possibilities; there are wonders worth studying all around us.

The Power to Transform the Ordinary

One pleasure of looking at art is enjoying a feeling of amazement that an artist has magically transformed ordinary materials into a marvelous work of imagination. When one enters the room that houses the contemporary Chinese artist Zhan Wang's *Urban Landscape* (I-27), one is first struck by the sheer beauty of a shining, fabulous city. Viewers tower above it, as if seeing the glittering metropolis from a low-flying jet. But once our eyes adjust to the glare, we can see that the city was not built with brick, glass, or mortar. It was constructed with highly polished equipment from a restaurant's kitchen—the skyscrapers are stacked colanders, stainless steel pots and pans, and the boats in the river are forks, knives, and spoons.

Ultimately, Zhan hopes the viewers of his city will move beyond its visual brilliance. The artist, who was trained in traditional techniques at an academy, wants us to think about the impact that urbanization has had on Chinese culture. The sparkling, commercial environment of the modern Chinese city is also cold and mechanical, disconnected from age-old customs and nature. Even the mountains that surround *Urban*

Landscape are made of stainless steel, like much of modern architecture. The rapid Westernization of cities, like Zhan's native Beijing, has had spectacular results but also has meant much has been lost.

Loss and urbanization were also themes in Rachel Whiteread's *House* (**I-28**), which transformed the most ordinary of materials—empty space—into sculpture.



1-28 Rachel Whiteread, *House*, 1993. Commissioned by Artangel Trust and Beck's (corner of Grove Road and Roman Road, London E3, destroyed 1994). Sign placed saying "We still live here."

In the 1990s, as part of an urban renewal project, a group of townhouses were slated for demolition in East London. Whiteread asked for permission to make a cast of the spaces in the very last house before it was torn down. Unlike traditional bronze sculptures that honor heroes in a public park, Whiteread commemorated the lost homes of ordinary people. The sculpture was begun immediately after the last remaining resident left. Wet concrete was sprayed into each room. When dry, the private spaces that were once lived in, walked through, dined in, and slept in became rock-hard. Then the exterior walls were removed to reveal the huge cast sculpture. Unfortunately, House existed for less than three months. In order to gain permission to complete the work, the arts organization that sponsored it had to agree that it would be only temporary. Today, the site is a green lawn with no sign of either the homes or the sculpture that commemorated them. It lives, like the buildings it honored, only in memory.

Like Rachel Whiteread, the artists Christo and Jeanne-Claude had to address the concerns of local government agencies to gain permission to make their vision concrete, but their process took much longer. *The Gates* (1-29) in New York City's Central

Park was first proposed in 1979. Municipal office after municipal office, mayor after mayor, turned them down until the project was finally approved, after four decades of proposals, in 2003. The final contract was forty-three pages long. Christo and Jeanne-Claude are veteran navigators of the formalities and red tape of government bureaucracies and, in fact, consider it part of their art process in all of their work (see Chapter 20). Their projects are not financed by art organizations or corporate sponsors but entirely by themselves. Preparatory drawings that are part of the proposal and early works of the 1950's and 1960's are sold to gather the funds. (The final cost for this project, according to the artists, was \$21 million.)

In February 2005, *The Gates* were finally installed and open to the public (1-30). That month was chosen by Christo and Jeanne-Claude because in February, the trees are leafless and it allowed the work of art and the buildings surrounding Central Park to be seen. Few tourists venture into the normally popular park on cold winter days. Typically the park's vegetation is dreary and lifeless, with patches of dirty snow on the grass and grimy salt on the paths. But the unveiling of the outdoor artwork transformed the chilly scene into a pageant. The dull hills and fields



1-29 Christo, *The Gates*, Project for Central Park, New York City. Drawing in two parts, 2003. Pencil, charcoal, pastel, wax crayon,technical data, fabric sample, aerial photograph, and tape on paper; 15" × 96" and 42" × 96". Photograph: Wolfgang Volz. © Christo and Jeanne-Claude 2003.



I-30 Christo and Jeanne-Claude, *The Gates*. 2005 Installation, Central Park, New York. The Gates, Central Park, New York City, 1979-2005. Photo: Wolfgang Volz. @Christo and Jeanne-Claude 2005

came alive with 7,503 bright saffron sails hanging from sixteen-foot gates that covered twenty-three miles of pathways. *The Gates* became an international event. Tourists and residents, families, friends, and couples were drawn to the park, and smiles could be seen everywhere as people gazed up at the saffron fabric blowing in the wind. Many veteran New Yorkers walked in parts of the park they had never visited before or noticed elements of the original landscape architects' design for the first time.

Three weeks after the installation first began, on a gray day with snow in the forecast, teams hired by Christo and Jeanne-Claude started removing all of the gates (every one of its parts later recycled). By March, Central Park was returned to its typical late winter form, but more than four million people had memories of a lovely February visit.

THE POWER OF ART FOR THE ARTIST

Without the vision and extraordinary persistence of Christo and Jeanne-Claude, there would have been no *Gates*. Of course, without artists, there wouldn't be any art. While we have been exploring the many powerful ways that art can affect and benefit us, we have yet to consider why someone would choose to make art. While a cynical observer might say artists make art to make money, those knowledgeable about art know (despite the headlines about the high prices being paid for certain artworks) that few of the millions of artists at work today will ever make a living strictly from sales of their art. The satisfactions of such a difficult and often painful occupation, then, must be more substantial than dreams of wealth.

Self-Expression

One of the most obvious and important reasons that artists make art is to satisfy the need for self-expression. Through their art, painters, sculptors, architects, photographers, printmakers, designers, and craftspeople are all able to express their personal visions. Mexican painter Frida Kahlo used self-portraits in the style of native folk art to express her own suffering. As a teenager, she suffered a terrible injury when the bus she was riding in was smashed by a trolley. Her spine and pelvis were shattered, and she spent the rest of her life in constant pain, despite thirty-five operations. In her self-portrait, The Little Deer (1-31), the many insults to her body are displayed in fantastic imagery, yet there is great strength in her face. Kahlo's willingness to use art to reveal her inner life gives her work great impact. For Kahlo, the act of creating such a picture must have had a cathartic, healing power.

The Artist at Play

Visual art has often been used to record personal and artistic suffering, yet it can be an equally effective record of the artist's joy, such as the simple joy of being creative. A sense of spontaneous playfulness, amusement, and imagination were trademarks of the German twentieth-century artist Paul Klee. Both the title of the watercolor Dance You Monster to My Soft Song! (inscribed in ink as part of the picture itself; I-32) and the way Klee drew his picture are whimsical. The gigantic monster, shaped rather like a bird cage with a bulbous red nose but tiny arms and legs, hovers precariously above the ground, while a strange piano-machine plays on. With legs akimbo and a nervous, cross-eyed look, the monster seems to fear that when the music ends he will crash to earth once more. Like many of Klee's works, the drawing has the quality of a doodle. We sense that Klee



I-31 Frida Kahlo, The Little Deer, 1946. Oil on canvas, $8\frac{3}{4}$ " × $11\frac{3}{4}$ ". Collection of Carolyn Farb, Houston.



#38.508.

1-32 Paul Klee, *Dance You Monster to My Soft Song! (Tanze Du Ungeheuer zu meinem sanften Lied)*, 1922. Watercolor and oil transfer drawing on plaster-primed gauze bordered with watercolor on the paper mount, 173/4" × 121/8". Solomon R. Guggenheim Museum, New York, Gift, Solomon R. Guggenheim, 1938. Accession

enjoyed the activity of creating this image, of using lines and colors to build these make-believe figures that could never exist in the real world.

The Artist's Memory

Visual art can also provide a vehicle for memory, a means of recording past experiences. One of the best-known artists to use art as a way of reliving the past was the Russian-born painter Marc Chagall. Chagall was influenced by the most advanced art movements of the twentieth century. As an impoverished young art student, he traveled to Paris and met daring artists like Pablo Picasso, who were experimenting with new ideas. Refusing to be bound by the limits of visual reality, artists at this time wanted to reach beyond what they saw to paint to what they felt, and beyond that to what they dreamed. Yet, even though his style is modern, the work of Chagall is filled with a love for the rural scenes of his childhood in Russia.

In his pictures, time and gravity have no power; people and animals whirl through the heavens regardless of the rules of nature. Looking at *I and the Village* (1-33), we see a friendly cow and a man

1-33 Marc Chagall, *I and the Village*, 1911. Oil on canvas, 6′ 35″ × 595″. Mrs. Simon Guggenheim Fund. (146.1945) The Museum of Modern Art. New York. NY. U.S.A.

holding a flowering twig in his fingers, looking face to face, united visually by a red disc. The huge cow seems benign and almost as if it is about to speak to the green man, or kiss him. Smaller figures also appear: a young woman milking, a man with a scythe walking to the harvest, a woman placed upside down who seems to be gesturing him forward, a child's face peeking over the edge of a hill behind which the tiny buildings of the village appear both right-side up and upside down.

Throughout his long career (he lived to be ninety-six), Chagall used art to create a magical land of love and wonder—remarkable for a man whose life encompassed two world wars, the Russian Revolution, and the Holocaust (in the 1940s, Chagall, who was Jewish, was forced to flee from his home in France to the United States). In this sense, Chagall's work is a tribute to the power of art to transcend political realities and allow the artist to regain a lost world with memory and imagination.

DEFINING ART

The source of the term art is the Latin word *ars*, which meant "skill." Although this is the oldest meaning of **art**, it is no longer the most common meaning. For us, the realm of the arts suggests *creative* endeavors and includes an entire range of activities classified as *cultural*. These creative arts are often subdivided into the broad categories of the *performing arts* (such as theatre, music, and dance), the *literary arts* (such as poetry, essays, and novels), and the *visual arts*.

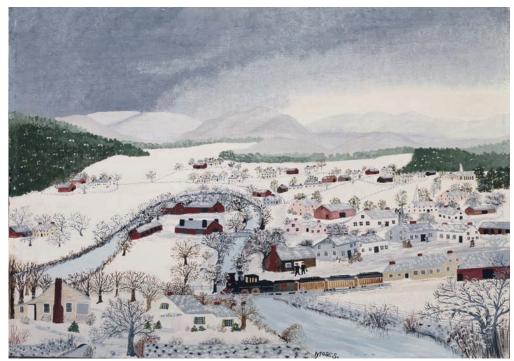
In everyday conversation, however, most people assume art means visual art, art that we experience primarily through our sense of sight. Saying that someone is an artist usually suggests that he or she draws, paints, sculpts, or designs. This is the meaning of art that this book will be using. We define the visual arts to include the artistic media of painting, sculpture, and architecture, as well as outstanding ex-

amples of drawing, printmaking, photography, design, digital art, decorative arts, and crafts. They are usually subdivided into the **fine arts** (such as painting, printmaking and sculpture) and the **applied arts** (such as architecture and design). For centuries, in Western art, paintings and sculptures have usually been seen as a higher form of artistic production than *applied* (or useful) arts, such as book illustration or wallpaper. However, for the last one hundred years or so, this distinction has not been as important. In Eastern art, there has never been such a division. For example, in the Chinese master Han Kan's *Night Shining White* from the eighth century (1-34), the calligraphy on the scroll was considered just as expressive and as much pure art as the painting of the horse.

A work of fine art is usually an original, or one of a kind, creation. Each work of art is the result of the artist's personal effort, the touch of his or her hands, the fresh invention of the artist's mind, spirit,



1-34 *Night Shining White*, attributed to Han Kan, 740–756. Album leaf, ink on paper, 11³/₄" high. Metropolitan Museum of Art, New York.



I-35 Grandma Moses, *Hoosick Falls, N.Y. in winter 1944.* Oil on masonite, 19¾" × 23¾". Acquired 1949, The Phillips Collection, Washington, D.C. © 1973 (renewed 2001) Grandma Moses Properties Co., New York.

and talent. There are exceptions to this rule. Prints, whether traditional or digital, for instance, are produced in a series from an original "plate" or digital image designed by the artist. Photographs, which were once thought of as mere mechanical reproductions of reality, have also been elevated to the status of fine art. Although their artistic merit has been recognized, however, prints and photographs are usually less valued (and less expensive) than drawings, paintings, or sculptures by the same artists. This reflects the fact that the work is not unique; it has been duplicated. A black-and-white print by a great photographer, however, is far more valuable than the painting of a mediocre artist.

Folk Art

Art is generally considered to be **folk art** rather than fine art when it is the work of untrained artists working in rural areas. Folk art includes painting, sculpture, and all the decorative arts, but where a fine art chest may be made of ebony inlaid with ivory, the folk chest will be a simple wood box painted in bright colors. American folk art has become very popular in recent years and commands high prices in antique stores and galleries; whole museums and galleries are devoted to folk art collections.

A good example of a folk (sometimes called "naive") artist is Grandma Moses, who was born on a farm in New York State in 1860 but did not really begin painting until the 1930s, when she was almost eighty. Although she had no formal training, her pictures (I-35) became so popular that by the time she died in 1961, she was a household word in the United States, and her scenes were reproduced on everything from greeting cards to kitchen curtains. Although she is not as well known today as she was at the height of her popularity in the 1950s, Grandma Moses's talent transformed an elderly farm widow, suffering from arthritis, into a nationally famous personality.

The power of her art lies in its freshness and vitality. Through her pictures, Anna Mary Robertson Moses had the chance not only to recreate and in a sense relive her own past but also to share that world with her viewers. Her most popular subjects included maple sugaring, winter sleighing, scenes of old-fashioned farm life, celebrations of holidays, and the seasons. As she concludes in her autobiography:

In my childhood days life was different, in many ways, we were slower, still we had a good and happy life, I think, people enjoyed life more in their way, at least they seemed to be happier, they don't take the time to be happy nowadays.

Craft and Decorative Art

When artists create useful or functional objects, such as ceramic pots, glass vases, silver bowls, woven rugs, and even wooden chairs, these are typically put in the category of *crafts* or *decorative arts*.

A good example is a Navaho "eye-dazzler" rug (1-36). Woven and designed by Native American women in the late nineteenth century, these blankets have a strong visual impact because of their bold use of color and simple geometric designs. These weavings were named "eye-dazzlers" because of their use of new, brighter yarn that became available to the American Indians during this period. Although purists and collectors tended to prefer blankets made with native vegetable dyes, the weavers embraced the new colors. It is not surprising that modern artists in search of a purely visual art have been inspired by these blankets and other decorative arts, such as quilts. The decoration of useful objects has been a source of visual pleasure for viewers in many ages and cultures.



The term *crafts* is also often used to describe contemporary objects that are handmade. Craft art is perhaps the most popular way of appreciating and practicing art in our society. Many people who would be afraid to invest in an original sculpture are perfectly comfortable buying a hand-thrown pot, while individuals who insist that they "can't draw a straight line" enjoy classes on weaving or wood carving. While some art historians and critics still think that such things as jewelry should not be considered art at all, attitudes are changing. Imaginative metal, fiber, and woodwork are now generally included in international surveys of design.

Design

What about functional items that are mass produced? Are they part of the world of visual arts? A broad definition of art would certainly include manufactured objects that are well designed—in fact, the Museum of Modern Art in New York devotes an entire section to outstanding examples of such objects as telephones, typewriters, and even helicopters. This field of art is known as **industrial design**.

An industrial designer must understand both art and engineering. Industrial design is the aesthetic refinement of products, making functional engineering solutions easy to use and understand, and attractive. The phrase "user-friendly" neatly conveys the goal of all industrial designers. One of the most successful containers ever designed is the Coca-Cola bottle (1-37), recognized around the world and used with only modest modification for nearly a century. The bottle not only must hold soda but also dispense it easily and only on demand. The narrow opening provides a continuous but not choking flow. The wide bottom makes sure it rests easily on a table without spilling. The bottle's curvaceous shape allows it to fit comfortably in one hand, the pattern of ribs ensuring that a cold, wet piece of glass does not slip and cheat us of our refreshment.

1-36 Germantown "eye-dazzler" rug, Navajo, 1880–1890. Split wool yarn, 2, 3, and 4 ply, $72'' \times 50''$. Museum of Northern Arizona, Flagstaff.



1-37 Alex Samuelson and T. Clyde Edwards, Coca-Cola 6.5-ounce glass bottle. The Coca-Cola Company.

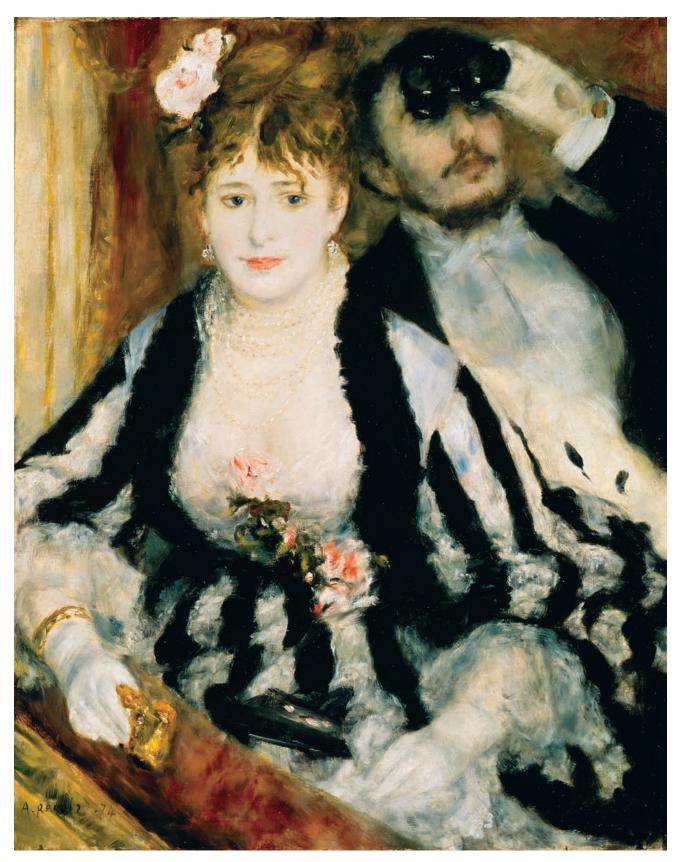
The name "Coca-Cola" is, of course, featured prominently on the bottle. In fact, the ribs on the bottle subtly lead our eyes to the smooth center where it is displayed. This *logo* or trademark was the work of a *graphic designer*. **Graphic design**, sometimes called *commercial art*, includes two-dimensional designs that are mass-produced, such as logos, magazine layouts, decorative posters, and the cover of this book. Much thought and effort goes into every aspect of a logo, since it represents the company. The script Coca-Cola logo implies a product that has been tested by time, but the more modern typefaces that surround it make sure we know it is meant for young and old alike.

While representing a company is certainly important, graphic designers who design currency have the challenge of representing an entire nation and its people. For the arrival of a new millennium in 2000, a team of designers in New Zealand were given the task of designing a special commemorative \$10 bill (I-38). Their mission was to represent the country's past and future and to capture the "kiwi spirit." In





1-38 New Zealand \$10 bill, front and reverse.



1-39 Pierre-Auguste Renoir, *La Loge*, 1874. Oil on canvas, 31" × 25". Courtauld Institute Galleries, London (Courtauld Collection).

addition, they needed to integrate security measures that are essential elements in contemporary banknotes. Naturally, the bill also needed to be clear, attractive, and functional.

The designers succeeded brilliantly and in a fashion quite unlike the stale approach of many other nations. While patterns are used in almost all currency to make counterfeiting difficult, the flowing decorations on the front of the bill are attractive and significant. They are a mix of traditional Maori art, Pacific shell patterns, and digital numbers symbolizing new technologies. At the center, a Maori war canoe plunges toward us—the boat that brought the first settlers to New Zealand. At the right, a satellite dish represents the latest communication media. The reverse of the bill is meant to symbolize the Kiwi spirit of adventure. Surfers, skiers, kayakers, and sky divers surround children at the center. The bill is made of polymer and incorporates the most advanced security features available. As in all aspects of the millennium note's design, this function is joined seamlessly with meaning and aesthetics. The silver ferns in the transparent window at the corner reflect rainbow light when shifted. Within the "0" of the number 10 is a watermark of a sacred Maori head that symbolizes ancestral figures and heaven.

Art Is Beauty

Many people think art must be beautiful to qualify as great art. For them, the primary power of visual art is its ability to delight the eye. Art that is visually pleasing seems to justify itself and needs no other reason to exist. "A feast for the eyes" is one way to describe this type of artwork. This *was* the chief criteria for fine art over several centuries but is no longer accepted as the only or even a vital issue today. As we begin our study of art, it is also important to keep in mind that standards of beauty are not universal. Aesthetic taste can vary with different cultures and time periods.

For example, when the **Impressionists** first exhibited their work in late nineteenth-century Paris, it was rejected as hideously ugly. In fact, one critic accused them of "making war on beauty!" To the ordinary viewer of 1874, pictures like Pierre-Auguste Renoir's *La Loge* (**1-39**) seemed unfinished and crude. Today people flock to see the same work, which looks to the modern eye not only beautiful but also impossibly sweet, romantically ideal.

Although many people assume that visual art should be beautiful, or at least realistic (and prefer-

ably both), you will find many artworks in museums that do not fit this mold. Some great works of art get their power from the depiction of "ugly" subjects or the distortion of forms. The subjects are not beautiful or realistically portrayed. Willem de Kooning's Woman and Bicycle (1-40) is a good example of the kind of painting that upsets some people today as much as the work of the Impressionists did a hundred years ago. "My child (or dog) could do a better job" is not an uncommon reaction to this type of artwork. Viewers are often upset by what they consider the gratuitous ugliness of such modern art.



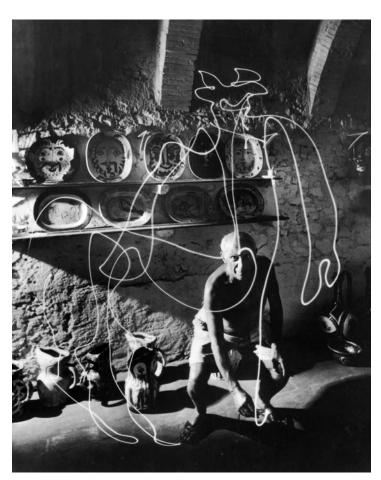
1-40 Willem de Kooning, *Woman and Bicycle*, 1952–1953. Oil on canvas, 6' $4\frac{1}{2}'' \times 4'$ 1". Collection of the Whitney Museum of American Art, New York (purchase 55.35).



I-4 Detail of figure 1-39.



1-42 Detail of figure 1-40.



1-43 Gjon Mili, Pablo Picasso drawing a centaur with light, 1950.

As different as they appear at first glance, upon reflection Renoir's and de Kooning's pictures of women do share certain attitudes about art. Both are committed to loose, expressive brushstrokes (see details, I-4I, I-42). Neither artist feels it is necessary to be absolutely precise and descriptive; they feel that art can hint rather than be dogmatic. Both believe in the use of colors to communicate emotion. Even though they are painting eighty years apart, the artists share a philosophy of art that stresses expressiveness. De Kooning's paintings can be seen as a more radical development of the ideas that made Renoir's approach seem unique in the nineteenth century.

Art Is Originality and Creativity

The pictures of Renoir and de Kooning share not only a belief in expressiveness but also a belief in the value of originality. It is often said that the one thing that sets great art apart is its originality. The accepted idea is that a work of art should be a unique creation, the expression of the individuality of the artist. Those artists whom we consider greatest, like Pablo Picasso (1-43), kept developing from one successful style to another, always searching for a new mode of visual expression. The photograph (page 32) shows him experimenting with drawing with light, something only possible to see in a photograph. He is in his pottery studio, ceramics being only one of the many media he explored. This constant striving for

newness and originality sets him apart from the artists of the cave paintings and the Ancient Egyptians, who repeated a similar style for centuries according to a strict set of rules, or artistic formulas.

Generally, since the beginning of the twentieth century, the word imitation is usually associated with unoriginality rather than superior art. But in the last fifty years, even the idea of originality has been challenged by contemporary artists. As aware residents in a world of mass production, mass consumption, and mass media, some artists have created a kind of mass-produced art. Andy Warhol, for instance, became famous for his multiplication of images, as in 30 Are Better Than One (Mona Lisa) (1-44). Using a stenciling technique, Warhol appropriated someone else's design-in this case Leonardo's Mona Lisaand repeated it to create a new work of art. He created similar pictures using such popular images as Campbell's soup cans and identical photographs of Marilyn Monroe. It is rather amusing to see art collectors today attempting to sort out the "genuine" Warhols from the work of his followers and fakes. This is especially difficult since Warhol's work was done in his studio, known as "The Factory," where assistants often made art while Warhol acted out his role as a famous artist, going to parties and talking to the press.

Ways to Understand Art

If our goal is to achieve a fuller knowledge and appreciation of art, we should avoid utilizing only one theory and excluding much of what might be relevant to a work of art. We have already seen that art has a variety of purposes and aspects. No single theory has yet been able to encompass them all in a useful way. To try to fence art in for the sake of any theory seems senseless. No one can determine in advance which questions or information might increase our understanding of a particular work of art. To understand art, our primary question should be, *Why does it look this way?*

The viewer begins with the object itself. The main function of any work of art is to provoke aesthetic interest. But art should also be intelligible to the viewer. Integral to its success are formal concerns: its design and composition. In Chapters 2 and 3, we will study the elements of art and design to understand the structural language of art objects. Examination of the work of art should yield a sense of the artist's mastery of design principles like har-



I-44 Andy Warhol, *30 Are Better Than One (Mona Lisa)*, 1963. Silkscreen ink on synthetic polymer paint on canvas, $9'\ 2'' \times 7'\ 10\frac{1}{2}''$. © 1993 The Andy Warhol Foundation for the Visual Arts, Inc.

mony, balance, rhythm, and pattern. No one element is essential, but if one is missing, its neglect must be justified by a special reason. For example, a chaotic effect might be explained by the artist's desire to reflect the frenzy of modern life. Or it could simply be a lack of the skill necessary to organize the subject matter. In Chapters 4 through 11, the materials and techniques used by artists will be studied. One generally expects an artist to control the necessary means to reach his or her goal. However, skillful handling of materials is what a philosopher would call "a necessary but not sufficient condition." In other words, the presence of technical skills does not necessarily create a work of art, but its absence would require an explanation, like "I am rejecting traditional concepts of skill, which I associate with a dead tradition." As we will see, it is common in the Western art of the last 150 years for artists to invent new techniques rather than follow past practices.

The Artist and the Art

This textbook accepts the notion (not universal, but generally accepted) that the more we know about the conditions under which an artwork was produced, the better we will see it. This includes exploring aspects of an artist's biography that might be relevant. When was the artwork made? What were the artist's previous works? Can we see a progression? What ideas were current then? Was it left unfinished, or can we assume that it was meant to be seen this way? Can we determine the artist's intentions? What did the artist believe in? Even personal questions like, "Who were the artist's friends?" could have an impact on a particular work if some of an artwork's conception was influenced by discussion with a group of artists.

Few artists have been as generous in providing their influences as the nineteenth-century painter Gustave Courbet was in his huge painting Studio of a Painter: A Real Allegory Summarizing My Seven Years of Life as an Artist (1-45). Courbet called himself a Realist painter, setting himself against the

popular movements of his time in France, Neo-Classicism and Romanticism (see Chapters 16 and 17). He rejected grand historical subjects or religious images and once said, "Show me an angel and I'll paint one!"The artist believed that his work was and should be a product of his own experiences, not imagined myths or scenes from the past that he never witnessed. In his studio, we can see the artist at the center, painting a landscape of the woods near his home, with two admirers—a small boy and a nude model (perhaps his son and mistress). At either side are friends (among them well-known philosophers and writers) and local townspeople. Courbet came from a farming family, and he often depicted working-class people from all walks of life in his paintings. This upset viewers, because in his time, people from the lower classes were considered not suitable for high art. Nor was an honest depiction of a nude woman. Nudes were generally given names from mythology, like Venus or Aphrodite, to justify their appearance. When his painting was rejected by an official jury, Courbet took the unusual step of exhibiting the nineteen-foot-wide picture at a



1-45 Gustave Courbet, Studio of a Painter: A Real Allegory Summarizing My Seven Years of Life as an Artist, 1854–1855. Oil on canvas, 11' 10" × 19' 7". Musee d'Orsay, Paris.



1-46 Tony Oursler, Studio: Seven Months of my Aesthetic Education (and then some), 2005. Mixed media installation.

pavilion he paid for himself at the Paris World's Fair of 1855.

The message of *Studio* seems to be that Courbet's approach to art cannot be fully understood without considering where he grew up and who his friends and acquaintances were. Yet Courbet's *Studio*, while designed to be a work of its time, is not only a product of his past but also the past of art history. It was clearly affected in style and subject by a past master who Courbet admired—the Spanish Baroque painter Diego Velazquez's painting of his studio in the royal palace, *Las Meninas* (see 15–17).

Art and Art History

The relationship of an artwork to art history can be a significant matter in determining whether an artwork is significant or inconsequential. Even an artist's rejection of tradition requires an understanding of the tradition—since the artist is still conducting a dialog with it. This is why an artist is often described as "naive" if he or she is unaware of art history. Like all of us, the artist is conditioned and affected by the past. This is no weakness or sign of lack of originality. If there could ever be an entirely original artistic genius, this individual would most likely be a sad genius indeed. The art theorist R. G. Collingwood has written eloquently on Modern Art's love of novelty:

If an artist may say nothing, except what he has invented with his own sole efforts, it stands to reason he will be poor in ideas.... If he could take what he wants wherever

he could find it, as Euripides and Dante and Michelangelo and Shakespeare and Bach were free, his larder will always be full and his cookery . . . be worth tasting. . . . Let all artists . . . plagiarize each other's works like men . . . modern artists should treat each other as Greek dramatists or Renaissance painters or Elizabethan poets did. If anyone thinks that the law of copyright has fostered better art than those barbarian times could produce, I will not try to convert them.

Today, the once revolutionary Courbet's Studio is firmly part of the tradition of artist's portraying their studios and has influenced many artists who came after him. Obviously, the title of Tony Oursler's multimedia installation Studio: Seven Months of my Aesthetic Education (and then some) (1-46) tells us that he designed his installation as a response to the earlier painting. While it is certainly a unique and imaginative work, one of the pleasures of studying it is comparing it mentally with Courbet's nineteenth-century masterpiece. In fact, they were once exhibited next to each other in Paris. But the twenty-first-century artist Oursler created a three-dimensional environment, so the viewer can walk into the studio and experience it in a new way. In addition to housing a collection of his own projects (see 9-25), he invited other artists, musicians, and directors with whom he had collaborated in the past to place examples of their own work. They were also people who he felt were important influences on him. For Oursler, a studio depicts more than an artist's place of work but "a model of the artist's mind, process and world view."

WHEN WE KNOW MORE, WE SEE MORE

This chapter presents ways to better understand and judge art. It is important to remember that an artwork need not be perfect; even a great work of art can fail in some ways and still be a masterpiece. Understanding art is similar to understanding people; the process is never finished but continually deepens as more is discovered. This is part of the power of art. The serious viewer studies the background of a work, which is far more than the white walls and polished wood floor of a gallery. The background can include the artist's biography, inner psychology, and the traditions and society that influenced the artist. All of these elements can tell us why the artist chose to make the artwork look the way it does. No background is absolutely necessary (just as we can appreciate people without knowing everything about them), but the appreciation of a work of art

is certainly increased by awareness of the context in which it was produced. It helps us see more than we could before.

Beginning the Journey

As you begin your study of art, think of it as you would a trip to another country. Dedicate yourself to expanding your horizons and remaining open to the many things you will be introduced to in this course. This kind of openness may be difficult to maintain when you are confronted with a work of modern art for the first time. For many viewers who are not familiar with contemporary art, their negative response is probably based on an immediate gut reaction. Nothing is wrong with having a strong, personal reaction to visual art—in fact, modern artists hope to create such reactions; most would rather have people hate their work than be bored by it. But viewers who take a quick look and react to art,



1-47 Sarah Sze, Corner Plot, 2006. Outdoor mixed media installation, New York. Courtesy Marianne Boesky Gallery, New York

without really trying to understand it, are missing a rich world of visual experience. All one needs to do is invest some time and thought.

For example, in 2006, pedestrians walking by a corner in midtown Manhattan were amazed to see what appeared to be a piece of a typical city building that had either fallen to the ground or had begun emerging from underneath the pavement (1-47). Many New Yorkers simply passed it by, but those who took the time to peek into it were rewarded with a view of an interior of an artist's studio, although one that looked as if it had been hit by an earthquake. Extending below street level was an arrangement of many ordinary items, such as a drafting table, lamps, stacks of paper towels, an iPod, pencils, and a miniature spiral staircase. Those who looked up and around noticed that the strange entity (actually a temporary installation by the artist Sarah Sze) was modeled on a building across the street. According to Sze, her goal for Corner Plot was that it would be "a surprise . . . a point of discovery," and so it was for people who stopped to look.

During this course, you will wander around the globe and discover art from many countries and continents. Time will be no barrier as we move across the centuries. We will explore many ways of looking at and understanding art. At our journey's end, when you finish this course, you will be in a better position to say whether you think the *Mona Lisa*'s reputation is deserved, whether de Kooning had any talent, or whether Duchamp should be considered an artist. And your decision will be based on knowledge rather than prejudice or gut feelings.

After the course is over, keep in mind that you have begun a lifelong journey, one in which you will never be alone. As the French novelist Marcel Proust wrote:

Only through art can we get outside of ourselves and know another's view of the universe which is not the same as ours and see landscapes which would otherwise have remained unknown to us like the landscapes of the moon. Thanks to art, instead of seeing a single world, our own, we see it multiply until we have before us as many worlds as there are original artists....

That is the power of art.

The Primary Elements

or many viewers, one of the most frustrating aspects of art is trying to describe what they see. It is as if they were trying to explain something in a foreign language. This chapter introduces the vocabulary of the language of art, which revolves around the basic visual elements that all artists use: space, line, shape, light, texture, and color. With these elements, artists are able to create incredibly diverse images, from Egyptian pyramids to the *Mona Lisa*. The fundamentals of art and design provide a way to describe the various forms of art; they are the basis of the language in which all art is discussed.

SPACE

In the Old Testament we are told, "In the beginning the earth was without form and void." Empty space is the most fundamental of the elements of art and design. Each artist has a profound sense of the void as he or she stares at the piece of paper, the canvas, the block of marble, or the empty site before beginning work. Space is the field of action on which all artists do battle. Many artists feel as Rembrandt seems to in *The Artist in His Studio* (2-1), a little overwhelmed as they begin. Artists work within two kinds of space. **Two-dimensional space** is flat and can only be viewed from one side. Anything

that exists in this space, like the space itself, will have height and width but no real depth. However, two-dimensional art forms such as drawings or paintings often create the *illusion* of depth. **Three-dimensional space** contains objects that can be viewed from all sides, objects that have height, width, and depth. This is the kind of space we actually live in. Sculpture and architecture are examples of three-dimensional art forms.

Defining space and controlling it with the other visual elements is what making art is all about. The process begins with the artist choosing from the range of elements. In many cases, the first choice is the simplest of elements—the line.



2-1 Rembrandt van Rijn, *The Artist in His Studio*, c. 1628. Oil on panel, 9 3/4" x 12 1/2". Museum of Fine Arts, Boston. (Zoe Oliver Sherman Collection, given in memory of Lillie Oliver Poor). 38.1838. Photograph © 2008 Museum of Fine Arts, Boston.

To a mathematician, a line is the shortest distance between two points. To an artist, a line is much more than that. It is an element of infinite potential, capable of conveying a wide variety of emotions and meanings. Vincent van Gogh's drawing *Fishing Boats at Sea* (2-2) shows the versatility of a line. By varying

at Sea (2-2) shows the versatility of a line. By varying length and width, or by choosing various types of lines (straight, curved, or angular), the artist creates a seascape of great complexity, reflecting the many forms of nature.

All lines are the result of an artist's movement. When they particularly reveal the action of drawing, the motion of the hand and arm, they are described as *gestural*. Van Gogh's gestures are what make his

drawing exciting. Notice how different kinds of lines convey different moods. Horizontal lines seem calm, verticals inspiring, and diagonals and curves energizing. A line's texture, whether it is scratchy or smooth, for example, can imply feelings as well. The many and various lines in van Gogh's drawing almost "sound" different. One can imagine the crash of the swirling lines in the foreground as opposed to the calm, bold lines of the sea. We can hear the sails pulling taut in a stiff breeze because of the tight geometry of their lines.

By varying a line's width (or *weight*) as it is drawn, an artist can make a line seem to twist and turn as if it were moving in space. The viewer sees the line as if it has depth, as if it were curling. Artists also use this technique to create the illusion of a solid form.



2-2 Vincent van Gogh, *Fishing Boats at Sea*, 1889. Pencil, reed pen, and ink on wove paper, $9\frac{1}{2}$ " \times 125%". Kupferstichkabinett, Staatliche Museum zu Berlin, Berlin, Germany.

In *Hotei*, a drawing by a follower of the Japanese artist, Hokusai (2-3), the solidity of the Zen monk is created by effective and economical shifts in each line's weight. A line that begins with a broad sweep of the brush around his substantial belly trails away at his chest. Another can describe with subtle changes of weight and direction, the side of a leg, the bulge of a heel, the rise of an arch, and with a mere flick of the brush, the end of a toe. These kinds of lines are called **contour lines**, because they describe the edge of a form.

The imaginative use of line in Japanese art and calligraphy interested many of the Abstract Expressionist artists of the 1950s. Franz Kline, a friend of de Kooning's (see Chapter 1), made expressive lines the focus of his pictures. In *New York*, *New York* (2-4), he used a wide brush loaded with paint to make powerful gestural lines that carved up the space of the huge canvas. Kline's title tells us he felt the result had the impact of a city crowded with skyscrapers.

While lines are technically two-dimensional elements, three-dimensional artists like sculptors use



2-3 School of Katsushika Hokusai. *Hotei*, c. 1840s. Ink on paper, $10\frac{12}{2}$ × $7\frac{12}{2}$ Library of Congress, Prints and Photographs Division.

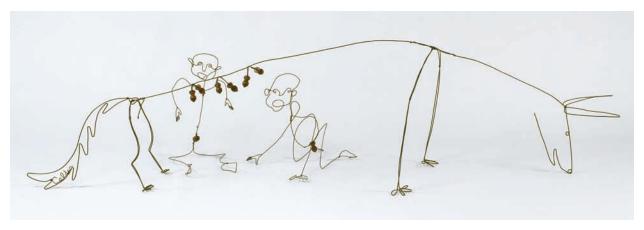
them also. Materials that are significantly longer than they are wide—for example, string, sticks, or steel bars—are considered linear elements in sculpture. For example, in *Romulus and Remus*, Alexander Calder (2-5) draws in true three-dimensional space by using linear forms, in this case wire. Edges or contours are also perceived as lines in sculpture. If you look at the corners of a room, you can observe that this is also true in architecture. Three lines converge at each corner in most rooms. Dramatic edges or lines on all kinds of things often elicit comments like, "Look at the lines of that boat!"

SHAPE

By their very nature, lines divide space. As a line twists along its path, you may have noticed it begins to seem as if it is tracing the border of a shape, an enclosed



2-4 Franz Kline, *New York, New York*, 1953. Oil on canvas, $79'' \times 51''$. Albright-Knox Art Gallery, Buffalo (gift of Seymour H. Knox, 1956).



2-5 Alexander Calder, *Romulus and Remus*, 1928. Wire and wood, 30 ½" × 124 ½". Solomon R. Guggenheim Museum, New York. Accession #65.1738. Photograph by David Heald ©The Solomon R. Guggenheim Foundation, New York.

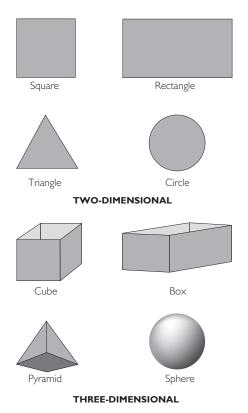
space. In fact, while it is more common for shapes to be built from several lines, it only takes one line that turns around and connects to its beginning to make one. A circle would be an example of a shape made with one line. In art, the word *shape* is usually used to describe two-dimensional forms. A three-dimensional shape is called a **mass**. Unlike a shape, a mass has real

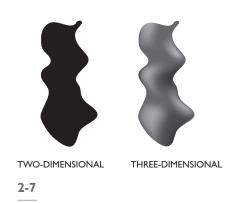
weight, like a block of marble. The space inside a mass, like a building's dome, is called its **volume**.

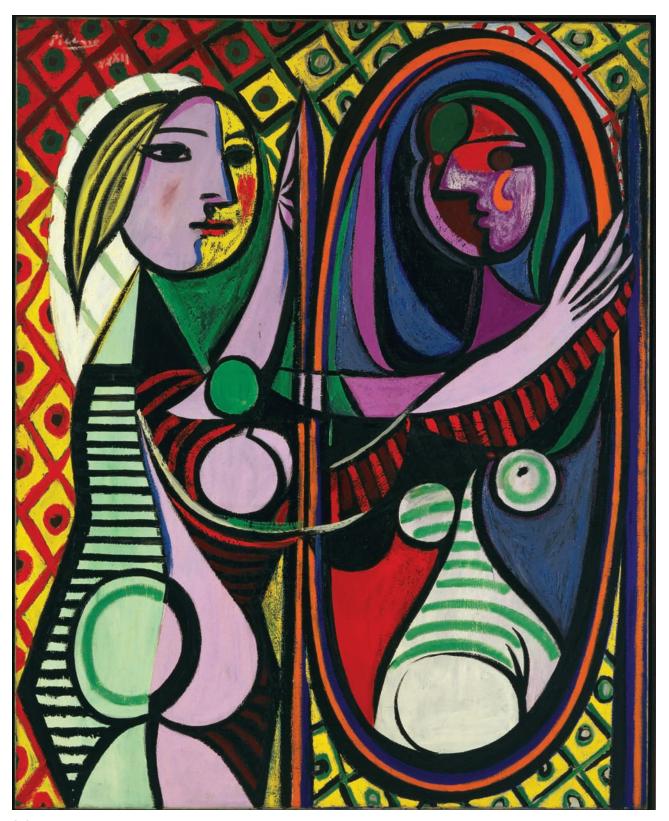
Although shapes come in all sizes and types, whether two-dimensional or three-dimensional, they are usually described in four ways: geometric, organic, abstract, and nonrepresentational.

Geometric shapes (2-6) are formed by straight lines or curved ones that progress evenly. Squares, rectangles, triangles, and circles are all examples of this kind of two-dimensional shape. The three-dimensional equivalents are the solid geometric masses called the cube, box, pyramid, and sphere.

Organic shapes (2-7) are formed by uneven curves. They are sometimes called *naturalistic* or *biomorphic*. Shapes that look like amoebas or treetops would be included in this category.







2-8 Pablo Picasso, *Girl before a Mirror*, 1932. Oil on canvas, $63\frac{3}{4}'' \times 51\frac{1}{4}''$. The Museum of Modern Art, New York (gift of Mrs. Simon Guggenheim).

Abstract shapes are representational shapes that have been simplified. Even when they have been reduced to their basic underlying forms, distorted or exaggerated, the original sources of the shapes will remain recognizable. Abstract shapes can be either organic or geometric.

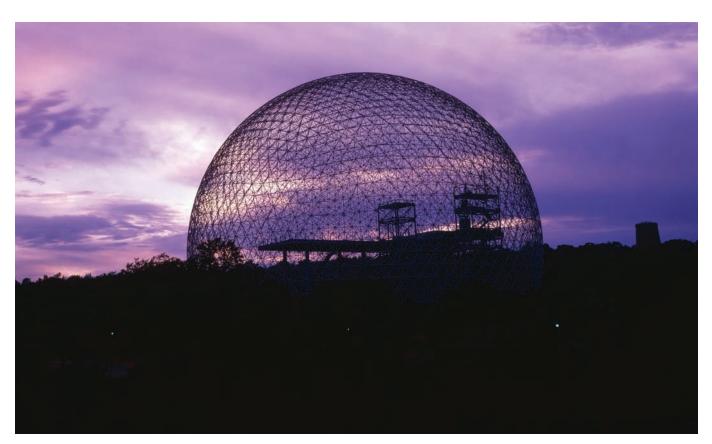
Nonrepresentational shapes are those that are not meant to refer to anything we can see in the real world. They are sometimes called *nonobjective* or *totally abstract*. These shapes can also have either organic (*soft-edged*) or geometric (*hard-edged*) qualities.

In *Girl before a Mirror* (2-8), Picasso creatively employs all types of shapes and even shows how one shape may share the qualities of two different kinds. The young woman's face, for example, is recognizable but is missing many of the details. Because it has been simplified, we say it has been *abstracted*. It has also become more geometric. The curve of her belly has also become an abstract form because it has been

simplified and exaggerated. Still, it remains a naturalistic abstract shape. Behind her are nonobjective shapes (perhaps wallpaper) that form a colorful pattern in the background. We do not have to identify them to enjoy their rhythm and bright colors.

THE SPIRIT OF THE FORMS

All geometric forms, whether two- or three-dimensional, suggest order, mathematics, and reason. Buckminster Fuller's *United States Pavilion*, *EXPO 67* (**2-9**) reflects these qualities of geometry. His building seems perfect and ideal. The absolutely consistent repetition of one basic element gives it unity and coherence. Yet it is not without a sense of movement. Most curved geometric forms, like circles and spheres, convey a feeling of motion. On the other hand, "squared-off" geometric shapes, like a square or a cube, generally imply perfect calm and stability. This is why most architects prefer them for their buildings.



2-9 Buckminister Fuller, *United States Pavilion*, *EXPO 67*, Montreal, 1967. Steel and Plexiglas geodesic dome, shown under construction, 137' high, 250' diameter.

The sculptures of Louise Bourgeois (**2-10**) are more difficult to categorize. Works like *Blind Man's Buff* seem to include shapes that fit all categories at once. Each bulbous part in the center seems like a living creature, but none that we can absolutely recognize. They crowd together, as if in a precarious huddle, and the outside forms seem on the verge of tumbling off the sculpture. Are these abstractions parts of living creatures or actually nonobjective shapes?

Compared to Fuller's dome, this sculpture's soft curves certainly appear much more naturalistic. However, compared to a realistic sculpture by Michelangelo, we would have to say Bourgeois's work looks very geometric and much more abstract. These simple comparisons remind us that categories in art are useful for discussion, but their meaning is usually relative.

LIGHT, SHADOW, AND VALUE

Light plays a critical role in art. It is vital to the presentation of any three-dimensional art form such as Bourgeois's *Blind Man's Buff*, and a museum or gallery director will spend many hours setting up the lighting of sculptures before opening an exhibit to the public. Light obeys certain physical laws. A mass that is lit by a single source of light will be brightest where it is closest to the source, whereas other parts of the mass will be less and less bright (or more and more in shadow) in relation to their distance from the light. Sections that do not face the light at all will be in complete darkness, as will anything directly behind the object. These are blocked from the light and will have a *cast shadow*.

Highlights and shadows define the shape of a statue. For instance, in *Blind Man's Buff*, light falling on the balloon-like forms heightens our sense of their roundness. They feel soft because they are softly modeled by gradually darkening shadows. Light also accents the rough textures of the heavy masses above and below them.

Artists working in two-dimensional media (like drawing or painting) often want to create the illusion of three-dimensional masses. This can be done by recreating the effects of light and shadow as they move around a solid object.

Art students who follow a traditional course of study will spend a great deal of time learning to draw such things as drapery in light because the illusion of three dimensions can be very powerful. A sense of volume is created by drawing the contrasting areas of lightness and darkness. The dramatic contrast between light and dark in Caravaggio's Sac-



2-10 Louise Bourgeois, *Blind Man's Buff*, 1984. Marble, $36\frac{1}{2}'' \times 35'' \times 25''$. © Cleveland Museum of Art, Leonard C. Hanna, Jr. Fund. 2002.29. Photo: Allan Finkelman. Art © Louise Bourgeois/Licensed by VAGA, New York, NY

rifice of Isaac (2-11) is called **chiaroscuro** and makes the figures and forms come dramatically alive. The light focuses our attention exactly where Caravaggio wants it and even directs the movements of our eyes. We are drawn inevitably across the painting from left to right; from the angel to the furrowed brow of Abraham, down to the razor-sharp knife he clutches in his hand, and then finally to Isaac's agonized face. Each of these details is remarkably clear and defined, paradoxically because of the deep, obscuring shadows that surround them.

As a student's eye becomes more experienced at seeing subtle changes in lightness and darkness (or value), his or her drawings of real things will seem more convincing. Few artists were ever better than Georges-Pierre Seurat at translating the subtle aspects of the effects of light. While most artists use a combination of line and shading to model forms, his drawings use only changes in tonal values. *L'écho* (2-12), without a single line, remains a persuasive and satisfying image of a young boy calling out to produce an echo. The boy's solidity is evoked by the soft contrasts in tones.

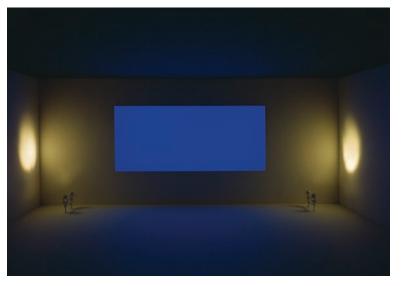
The contemporary artist James Turrell uses light itself as his medium. His installations transform simple spaces into sublime experiences. To view *Night Passage* (2-13), one walks into a dim, empty room with a simple blue rectangle apparently painted on



2-11 Caravaggio, *The Sacrifice of Isaac*, 1601–1602. Oil on canvas, $41'' \times 53 \frac{1}{8}''$. Galleria degli Uffizi, Florence.



2-12 Georges-Pierre Seurat, *L'écho*, 1883–1884. Conté crayon, $12'' \times 9 \frac{1}{4}''$. Yale University Art Gallery, New Haven (bequest of Edith M. Wetmore).



2-13 James Turrell, *Night Passage*, 1987. Rectangle cut in partition wall, flourescent and tungsten lamps, and fixtures, rectangular cut $82'' \times 191''$; room: $144'' \times 720''$. Solomon R. Guggenheim Museum, Panza Collection, Gift, 1991. 91.4080. Photograph by Erika Barahona © Solomon R. Guggenheim Foundation, New York. © James Turrell

the back wall. As one comes closer to the painting, it grows more luminous. If you have the courage to try to touch the mysterious painting, you are in for a surprise. Your hand will pass through it into a deep, empty space. There is no painting. The rectangle is made of light. You can even stick your head into it and gaze around. Inside you experience a seemingly infinite blue space—a place with no edges or shadows, an extraordinarily peaceful, pure experience of light.

TEXTURE

Turrell's work depends not just on light, but that a powerful human instinct will be stronger than our fear of security guards. Our fingers are used from birth to understand our environment. When we "cannot believe our eyes," we will use touch to confirm or deny what our eyes have told us. We will touch something to see if it is warm or cold, soft or hard. Many textures can be pleasurable; for example, soft velvet, smooth marble, and silky water are three very different pleasing textures. Sculptors find deep satisfaction in plunging their hands into wet clay and manipulating it. Some textures are disturbing, even painful, like the coarseness of sandpaper or the jagged edge of broken glass.

Artists who work in three dimensions create *tactile* textures, textures that can actually be felt. Like Turrell, most sculptors actually intend their art to be understood both visually and tactilely, and sometimes

not just by people. Visitors to the estate where the sculptor Henry Moore lived for the last forty years of his life are expected to walk the grounds and to run their hands along the huge sculptures. He always thought that the barriers between art and viewers were arrogant and pretentious. At Perry Green, viewers can get a sense of works like Sheep Piece's (2-14) metal surface when they touch it, its substantial weight when they lean against it, and its great size when they put their arms around it. However, when Henry Moore designed Sheep Piece, he wasn't thinking of people. It was inspired by and made for the sheep that graze the meadows around his home. The large metal sculpture's opening at the bottom is at a height that not only provides shelter for the sheep but is also comfortable for them to scratch their backs. The overall abstract design represents a ewe and a lamb, a kind of mother and child, where the large form protects the smaller one. Moore drew sheep often and described them as "rather shapeless balls of wool with a head and four legs," but he was always aware that "underneath all that wool was a body."

One does not need to touch all art objects to appreciate their textures. The African craftsman who made the *Oath-Taking Figure* (2-15) provided a visual feast of textures. The ritual figure mixes smooth wood, hard metal nails, soft animal hide, and a shiny mirror. While it may not be inviting, this strange (to Western eyes) combination of materials provides contrasts that are visually and tactilely interesting.

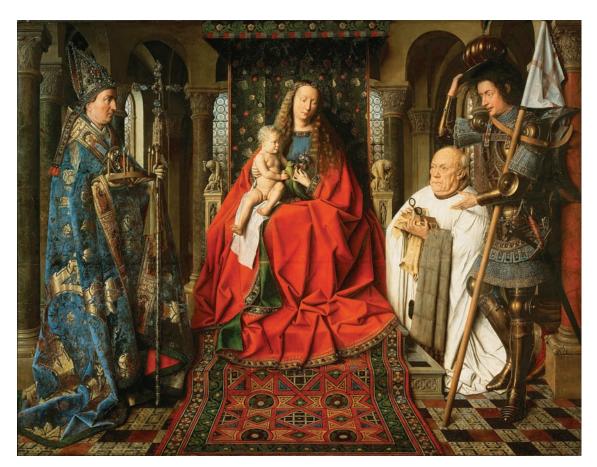


2-14 Henry Moore, *Sheep Piece*, 1971–1972. Bronze, 19' tall. Hoglands, Hertfordshire, England. [SHEEP PIECE one of several Henry Moore sculptures forming an open exhibition by The Serpentine in Kensington Gardens Summer of 1978 permanently installed at Perry Green in Hertfordshire] The Henry Moore Foundation.



2-15 Oath-Taking Figure, Congo, 1880–1920. Wood, nails, cloth, glass, paint.

Creating the illusion of texture has been an interest of two-dimensional artists for centuries. For a Northern Renaissance artist like Jan van Eyck, it bordered almost on obsession. In his desire to recreate visual reality and demonstrate his accomplishments, he would crowd his pictures like The Virgin with the Canon van der Paele (2-16) with all sorts of textures. With the use of delicate brush strokes, which are difficult to detect, and smooth transitions of light and dark, van Eyck shows us soft skin, curly hair, translucent glass, shiny armor made of many metals, smooth marble tile floors, an ornately carved stone throne, and fabrics of all kinds, including elaborate rugs. Van Eyck's dedication to visual truth, as seen in the lavish simulation of surfaces, shows not only his skill but also his religious devotion. He worked many hours to surround the Madonna and her child with a gorgeous and sumptuous setting.



2-16 Jan van Eyck, *The Virgin with the Canon van der Paele*, 1436. Tempera and oil on wood, approximately $48'' \times 62''$. Groeningemuseum, Bruges, Belgium.

COLOR

It is not just the textures that make Van Eyck's painting seem so dazzling. It is also the rich, vibrant colors, like the bishop's brilliant blue and gold mantle and Mary's bright red cloak at the center. The value of color was well known during the Renaissance. In fact, contracts for a commissioned painting like this would spell out not only the subject, but also the colors to be used and how much money should be spent on them.

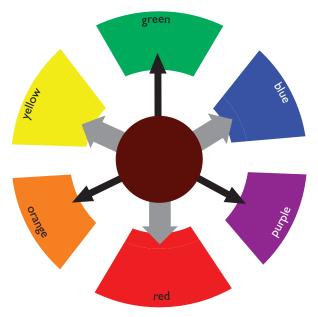
Why do we love color? Color affects us unconsciously, emotionally; we are drawn to it instinctively. Color has been an integral part of artwork since prehistoric times. Using earth and minerals, cave artists made their pictures of bison more vivid by adding reds and browns. Small prehistoric figurines that are tens of thousands of years old show signs that they were originally decorated with colors. Even the marble statues of the Greeks, admired for centuries for their pure white surfaces, were originally colored to resemble flesh (see box). Today, artists use new artificial colors that can glow like phosphorous. Throughout history, color has remained a constantly fascinating and important tool for artists.

Describing Color

Anyone who has looked at paint chips in a hard-ware store has been confronted with the challenge of clearly describing colors. Even white paint seems to come in countless varieties, from brilliant to snowflake to linen to egg shell and on and on. While scientists believe that human beings with normal vision across the globe see colors the same way, different societies have various ways of naming them. Hungarians use two words for red, a tribe in New Guinea two for green, Navajo two for black but only one word that covers both blue and green. The Welsh have a word that refers to a color that is part green, gray, and blue.

Because of the importance and complexity of color in works of art, and in order to describe colors clearly, artists have developed a specialized and sophisticated vocabulary.

Hue refers simply to the name of a color on the color wheel or in the spectrum. For example, violet and green are two different hues. *Tints* are hues that have been lightened by white. Pink is a pale tint of red. *Shades* are hues that have been darkened by black. Navy blue is a very dark shade of blue.



2-17 (Color Wheel)

The neutral colors are white, black, and gray. They make tints and shades but do not affect the hue of any color. For example, no matter how much black, white, or gray is mixed into blue, it could not change it into purple. Neutral colors do, however, change the value of any hue with which they are mixed. Value means the relative lightness or darkness of a color. It is not the same as color **intensity**, which refers to the vividness of a particular hue. For example, when you turn up the color dial on your color television, you increase the intensity of the colors. The relative values between the colors remain the same. The darks are still darks; the lights are still lights. Colors that have a high level of intensity are sometimes described as saturated. Any addition of a neutral color will diminish a hue's intensity. In other words, pink is lighter in value than a pure red, but not nearly as intense.

Color Wheel

Artists employ a wide variety of colors that are made by mixing other colors. However, three colors cannot be made from any others. As in mathematics, where a prime number cannot be divided, in art they are called the **primary colors**: red, yellow, and blue. These are the sources for all other colors. When two primaries are mixed, they create the **secondary colors**. These are orange, green, and

purple. The mixing of primary, secondary, and neutral colors accounts for the almost limitless range of colors in art.

Many artists have found it useful to think of primary and secondary colors arranged in a circle called the **color wheel** (2-17). On the color wheel, the primaries are placed equidistant from each other, with their secondary mixtures placed between them. Part of the vocabulary of color is based on the color wheel. **Complementary colors** are directly across from each other on the color wheel. Red and green, yellow and purple, orange and blue are considered opposites, or *complements*. They have unique properties when they are paired: They accentuate each other's intensity, at times causing painful clashing.

Analogous colors such as green, blue-green, and blue are adjacent on the color wheel; when paired they form more pleasant harmonies because they are more closely related.

Half of the colors on the color wheel are called warm colors and the other half cool colors. The warm colors are the family of colors based on yellow, orange, and red—colors associated with extreme emotions, chaos, fire, and the sun. Part of the power of Jennifer Bartlett's *Spiral: An Ordinary Evening in New Haven* (2-18) is our instinctual fear of intensely warm colors. The cool colors are those based on blue, purple, and green—colors that are associated with calm, order, the sky, and the ocean. The nineteenth-century Romantic Caspar David Friedrich's painting, *The*



2-18 Jennifer Bartlett, *Spiral: An Ordinary Evening in New Haven*, 1989. Installation with oil on canvas, 108" × 192", painted tables and hot-rolled welded steel cones. Private collection. Courtesy Paula Cooper Gallery, New York

ART NEWS

Augustus: In Living Color!

he rediscovery of buried marble statues by ancient Greek and Roman sculptors during the early days of the Renaissance inspired Donatello, Michelangelo, and their followers. The cool white surfaces of the sculptures were believed to exemplify a long-lost rational age that needed to be reborn. Since then, white marble has been the material of choice for any sculptor who wanted to evoke the Classical ideals of calmness, rationality, and purity.

But in ancient times these sculptures actually looked quite different. Recent research has discovered traces of *polychromy* (multicolored paint) on them. As surprising as it may seem, these statues were originally clothed in bright-colored garments and their bodies painted in a flesh color. The old paints were composed of organic materials like eggs, so they simply disappeared over time.

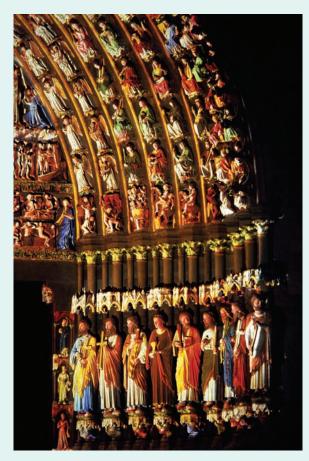
An exhibition at a museum in Copenhagen in 2004 called "ClassiColor—the Color of Greek and Roman Sculpture" integrated recreations of well-known sculptures in their original colors with the statues we have today. Many of the recreations, such as *Augustus of Prima Porta* (2-19), would have horrified Michelangelo. If you compare it to the original (12-23), it is easy to see why. Augustus's chest armor was once decorated in garishly bright blues and reds, his head with orange hair and eyebrows, and painted lips. Seen today as he was in ancient times, he appears more like a store mannequin or a socialite dressed for a costume party than an illustrious emperor.

Surprisingly, in the seventeenth century, scientists had already found evidence of the colors. But the European artists and writers of the 1600s were in the midst



2-19 Recreation of *Augustus of Prima Porta*, 2004. Ny Carlsberg Glyptotek, Copenhagen. Photograph by Lars Kirkegaard.

ART NEWS



2-20 Detail of Amiens Cathedral lit with colored lights.

of a Classical movement that believed that ancient pure white statuary was a highpoint of civilization. The "enlightened" artists of the time rejected the scientists' evidence as preposterous.

But how can we show today the true image of these centuries-old works? Because painting the actual statues for the 2004 exhibition was unthinkable and making molds of them would damage what was left of the original paint, the curators came up with a very twenty-first-century method to recreate them. Laser scanning was used to make a detailed three-dimensional digital model of each statue with millions of vertices. These scans were then utilized by computer-directed lathes to carve the precise copies out of synthetic marble. The replicas were then painted based on chemical analysis of the original pigments.

Research is showing that many more of our notions about past work will have to be revised. The Greek Parthenon, symbol of the Classical Age, was also brightly colored. So too were the great Gothic Cathedrals, which used colorful decorations to captivate, inspire, and tell biblical stories to a populace that was unable to read. Amiens Cathedral in France has embraced the new scientific evidence and now has an annual summer evening spectacular called "Cathedral in Colors." Visitors can see the architectural monument as it was centuries ago (2-20) with the aid of computer-generated lights. The Cathedral's exterior is transformed from the solemn edifice of textbooks (13–31) to one that would fit well with festivals in Mexico and South America.

While it is unlikely that today's conservators will insist on repainting these cherished monuments of the past, innovative exhibitions are now helping us understand that the masters of ancient and medieval times were not austere idealists immune to the power of color. Color has been an essential element of art and design in every century.



2-21 Caspar David Friedrich, *The Wreck of the Hope*, 1823–1825. Oil on canvas, 38" × 50". Hamburger Kunsthalle, Germany.

Wreck of the Hope (2-21), is a symphony of cool colors. It tells the story of an explorer's ship crushed by polar ice. The world is icy, cold, and silent, a vast universe to which man and his pitiful attempts to conquer nature mean nothing. Clearly, our association of these colors with temperature is very powerful. In fact, people instinctively feel a change in warmth when they walk from a blue to a yellow room.

The Science of Color

Like artists, scientists have been interested in color for a long time. In the 1600s, Isaac Newton noticed how a beam of light passing through a glass of water created a rainbow on a wall. He theorized that the water, acting as a prism, refracted the light, breaking it up into its different components. These compo-

nents, seen in the rainbow, are called the *color spectrum*. He discovered that white light is actually made up of all the colors.

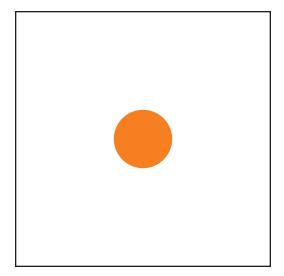
We see a white piece of paper because when light strikes it, none of the light is absorbed; the paper reflects all the light back to us. On the other hand, a black piece of paper absorbs all of the light cast on it. This explains why a black room is very difficult to make bright. Almost all of the light rays produced by lamps will be absorbed into the walls, leaving darkness. A colored piece of paper like red seems red because it absorbs all the colors from light *except* red, reflecting only that color back to our eyes.

We begin learning the names of colors when we are very young. It begins not long after we learn to identify a cow and a pig. We are asked over and over again, "What color is this?" If our parents show us an

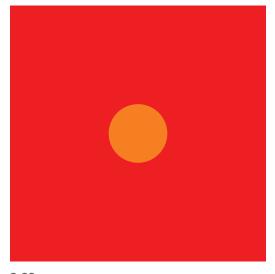
53

orange circle on a white background (2-22) and we say "red!," our parents will look disappointed and tell us to try again. When we finally say "orange," they smile and tell us how smart we are.

What our parents were teaching us is how to name **local colors**. A local color is the general color nature of anything that we see. But colors in the real world are not so simple or definite. For example, if a tree is green, are all trees the same color? Is each tree always the same color? What color is it at noon? Is it still the same color at sunset? What color is



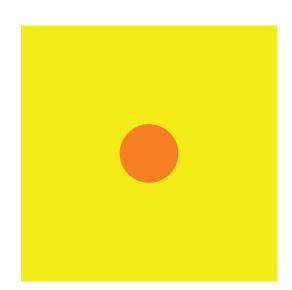
2-22



when it is wet with rain? Local color is useful for identification but is not specific enough for artists. Colors are much more variable than our parents ever told us.

In real life, we never see one color alone. Even if we enter a room painted entirely green, because of the lighting we see many different shades of green. Color is affected by changes in the light cast on it. An incandescent lamp would bring out the yellows in the greens; a fluorescent bulb would make the greens seem more blue.

A color is affected not only by light but also by what it is next to or surrounded by. For example, if we move the orange circle we saw on a white background to a red background (2-23), it will hardly seem orange at all; it will appear closer to yellow. This change is known as simultaneous contrast. Think of this first in black and white. A polar bear in a snowstorm is almost impossible to see, but a black bear would have a difficult time hiding. When two colors meet, they also accentuate the differences between them; their similarities will not be apparent. In fact, when that orange circle is on a yellow background (2-24), visually it is no longer orange (even though we know that is its local color). Visually, it is red. While artists need to be aware of both local colors and visual ones, they usually focus on what might be called the visual truth.



An analysis of Kees van Dongen's Modjesko, Soprano Singer (2-25) will give us an opportunity to use our new vocabulary of color. The painting combines warm and cool colors, but the warm colors dominate and make the strain of singing seem intense. That is because warm colors tend to excite, while cool colors relax the viewer. This is particularly noticeable in the singer's face—as the bright yellow changes to red, we feel the blood rush to her face as she reaches for a high soprano note. Warm colors tend to advance toward the viewer, while cool ones recede. Van Dongen takes advantage of these special properties. The singer's intensely yellow chest seems to expand against the pale blue dress, as does her throat, constricted by the cool ribbon around her neck.

In the background, around the figure, van Dongen uses red at its highest intensity. Shades of red become progressively lighter in value as they move away from the figure. Her hair, eyebrows, and eyes are painted in a dark tint of blue, so dark that at times they approach black. The painting's three-dimensional forms are created not by shading, as you would find in a drawing, but by changes in color value and intensity. For example, the face is shaped by shades of orange and red, with more intense colors reserved for the areas in deepest shadow. This combination of intense and pale, warm and cool colors creates the emotional, dramatic flavor of a singing performance.

Naturalistic versus Arbitrary Color

Modjesko, Soprano Singer is an example of the deliberate use of **arbitrary colors**. The subject's skin, hair, and costume are not painted in realistic colors; these colors are the invention of the artist. Invented colors can accentuate the meaning of a picture and give it an emotional content. Arbitrary colors were also used in Picasso's *Girl before a Mirror* (2–8).

For many centuries, however, European artists rarely used arbitrary colors. From the end of the medieval period to the late 1800s, artists preferred to use colors that imitated those in the real world, or **naturalistic colors.** John Constable's *The Glebe Farm* (2-26) is, as the artist described it, "very rich in color, and fresh and bright." Although he limited his palette to realistic hues, the painting also uses many of the properties of color we discussed in van Dongen's picture. The warmth of the earth with its reddish browns helps bring the path toward us. The cool blue sky is far away and gives the picture great depth; the hints of red in the lower clouds bring the sky just above the trees forward. As they move back



2-25 Kees van Dongen, *Modjesko, Soprano Singer,* 1908. Oil on canvas, 39%" × 32". The Museum of Modern Art, New York (gift of Mr. and Mrs. Peter A. Rubel).

in the distance, the trees have more blue mixed into the greens so they seem to recede.

Colors can help direct the viewer's attention. Notice how the red coat of a traveler draws us to the center of the picture. While Constable uses colors imaginatively, all of them—whether the white and brown markings of a dog or the pale yellow-green of a lawn—remain naturalistic. Throughout the history of art, one of color's most important uses has been to help the viewer identify subjects by use of their naturalistic colors. John Constable, like many artists before him and many since, follows that tradition.

Emotional Resonance

In the twentieth century, many artists have explored more directly the ability of color to affect our emotions. Some modern artists have felt that if used without reference to specific objects in the real world, color could create its own visual language of emotion, an art of pure feeling, like music.

Vasily Kandinsky's *Pink Accent* (**2-27**) experiments with the expressive potential of the visual weight of different colors.



2-26 John Constable, *The Glebe Farm*, 1827. Oil on canvas, 18" × 23 5%". © The Detroit Institute of Arts (gift of Mrs. Joseph B. Schlotman).

This picture has its own inner life; the feelings we receive from it come from colors and shapes that do not need to refer to things we recognize in the ordinary world. Kandinsky created his own totally abstract characters, with what he called

these unique beings we call colors—each alive in and for itself, independent, endowed with all the necessary qualities for further independent life and ready and willing at every moment to submit to new combinations, to mix among themselves and create endless series of new worlds.

Vasily Kandinsky, when he described colors mixing among themselves and creating endless series of new worlds, could also have been describing any of the other elements of art. Kandinsky thought of his elements as if they were living creatures, expressing a belief that many artists share: that in a successful work of art every point, every line, every element should be a living thing.

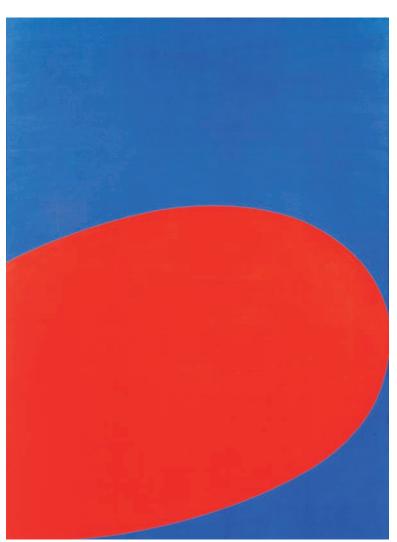
Kandinsky also wrote, "in art, as in nature, the wealth of forms is limitless." The challenge for an artist is to select and organize the many possible elements into a **design** that most suits the artist's intentions and is also visually satisfying. The next chapter will explain the principles behind successful designs. There are just as many possible approaches as there are elements.



2-27 Vasily Kandinsky, *Pink Accent*. Collection Nina Kandinsky, Neuilly sur Seine, France.

The Principles of Design

uman beings have a limited tolerance for disorganization; we are made uncomfortable by chaos and prefer order. Organization provides a sense of security; it is part of our desire to control our environment. We are not alone in the animal kingdom in our desire for regular meals, regular sleep, or regular hours, as anyone who owns a pet knows.



The artist reflects these basic instincts when he or she controls or **designs** the environment of a work of art. There are many possible strategies for a successful design, but almost all incorporate at least some of what can be called the *principles of design*. These have proven over time to be capable of organizing a coherent work of art from the wide range of ingredients at an artist's disposal.

As discussed in the last chapter, all artists deal first with empty space. In nature, while large open spaces that seem endless are beautiful, most humans do not choose to make their homes in the midst of them. We like to limit an area and then populate it with buildings. For the two-dimensional artist, the first important design decision is also how to limit space and define its borders. The boundaries demarcate what is known as the **picture plane**, the playing field of the art elements. Its frame establishes a separate arena for artistic activity from the whole world that surrounds it. Its proportions will determine the effect of whatever is within its borders.

3-1 Ellsworth Kelly, Red/Blue. Oil on canvas, $90'' \times 66''$ (228.6 cm \times 167.6 cm). Whitney Museum of American Art, New York. Purchase 96.53.4a-b ©Ellsworth Kelly.

PLACEMENT

The first element put inside the picture plane has a profound effect. Now the field is no longer neutral; it is actively involved in a dialogue with what has entered it. The arrival of the first element actually produces two shapes in a picture plane. The empty space around the element becomes an important shape, too, and must be consciously dealt with. The element is called the **positive form**, and the altered space is the **negative form** or **negative space**. They are also called the **figure** and the **ground**.

Artists are particularly aware of the effect each element has on negative space. To an artist, space is never really empty; it is more like space in physics, as described by Albert Einstein, an invisible solid. By placing different elements within it, the artist manipulates space. To summarize, the arrangement of elements in the picture plane is not only a design of lines and shapes but also a design of the spaces between them—the negative spaces. The artist must control both the subjects and the spaces around them to create a successful artwork.

Ellsworth Kelly's painting Red/Blue (3-1) may appear at first glance to be very simple, but the placement of the orange shape on the blue ground was carefully thought out. By having that shape just touch the right border, Kelly creates two new shapes from the blue ground, one large, one small. Because the orange form sits toward the bottom of the picture plane, it conveys a sense of weight. Placed higher it would appear light like a balloon. Tilting the form upward adds a bit of liveliness to the picture. If you hold up your hand and block your view of the blue shape at the bottom, you can see what the picture would be like if the orange shape had filled the bottom half. Would it be more or less dynamic? Artists often block parts of their pictures in this way to consider changes to a composition and to see possible effects.

While most people think of photography as a way to capture reality, James Welling used it to create totally abstract designs of positive and negative spaces. His series of *photograms* (3-2) called "New Abstractions" were produced by combining darkroom and computer techniques to make multiple reversals of photographic negatives and positives. A photogram is a photograph made without a camera. It is made by placing objects on sheets of light-sensitive paper and then exposing them to light (see Man Ray's *Rayograph*, 7-13). In Welling's approach,

strips of thin board were laid on photographic paper. After it was exposed and processed, the paper became black where the light had hit and white where cardboard blocked the light. Then Welling scanned the paper and used his computer to make a high-contrast negative. The negative was taken back to the darkroom to make the final photographic print. The resulting image is filled with positive and negative spaces of great variety. At times black seems to be the figure, but at other times it is white. Because of the mix of thin and thick flat shapes, it also has parts that seem to be three-dimensional.

Designing space is a more complex task for an artist actually working in three dimensions. Part of the experience of viewing a building or most sculptures is moving around them freely. A three-dimensional form should provide a new encounter every time we shift our position. Therefore, a three-dimensional artist has to consider spatial issues from every possible vantage point. This includes not just the sculpture itself but also the many negative spaces that are being carved out by the positive forms. Planning for all of those different points of view is difficult with only



3-2 James Welling, Untitled, no. 25 (New Abstraction), 1998. Silver gelatin print, $52 \, \%'' \times 38 \, \%''$. Donald Young Gallery, Chicago.

flat drawings, so many sculptors build small studies out of simple materials like paper, styrofoam (3-3), or clay, as in the 1958 photograph of the modern sculptor, Alberto Giacometti (see also 3-14).

Architects also must define negative spaces, like the windows or doorways of their buildings. By decorating the portal (3-4) with a carving of a giant's face, the architect of the Palazetto Zuccari provides an animated but rather forbidding entrance to his palace. One is forced to walk through the large mouth of a monster if one wants the privilege of entering.

Inside the "gullet" or entrance hall, one would encounter another kind of space that three-dimensional artists must design, a *confined space*. Architects must control both the exterior and interiors of their buildings. A good architect will make every room and every corridor into an aesthetic experience, even taking into account the experience of progressing from room to room (see 3–11).



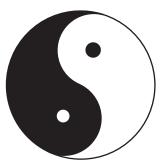
3-3 The artist Alberto Giacometti at work on a sculpture in his studio, 1958.



3-4 Portal of Palazetto Zuccari, Rome.

Balance

Balance is a natural human desire. We admire people who are well-balanced and tend to avoid those who are not. A loss of our ability to balance is disturbing, as anyone who has had an inner ear infection will know. Without it, we lose our state of well-being. Visually, we also find that achieving balance is an essential property in a satisfying work of art. The oriental symbol for *yin and yang* (3-5) is an example of perfect balance. It is also a good example of **figure-ground ambiguity**, where it is unclear which part should be called *figure* and which should be called *ground*. As in a checkerboard pattern, one can see either black



3-5 Yin/Yang Symbol.

or white as the subject. For someone from the Eastern world, however, this is not simply an interesting illusion but a meaningful symbol of the correct way of living. The perfect balance portrayed is the balance of the life forces of yin and yang, the resolution of opposites. It is a symbol of an ideal world where night and day, work and play, emotions and logic, male and female, hot and cold, activity and rest all exist together in equivalence. One's life is out of balance when any of these things is stressed more than its opposite.

During the design process, balance is constantly changing. A mark as simple as a dot can affect the whole *equilibrium* or balance of a work of art. For example, imagine shifting one of the dots in the yin/yang symbol. It would unsettle the balance, thereby requiring a change of position or another element to be added in the field to create equilibrium. When the element enters, a new balance will need to be struck. Depending on its placement, the new shape could dominate its neighbor, be its equal, or seem overwhelmed by it.

The importance or **visual weight** of each element in a picture plane is always relative; it competes with its neighbors and is affected by the arrival of any new form. The visual weight also varies as its own position, color, size, shape, or texture changes. As the number of elements increase, the relationships become more and more complex, and maintaining equilibrium in the design is a greater challenge.

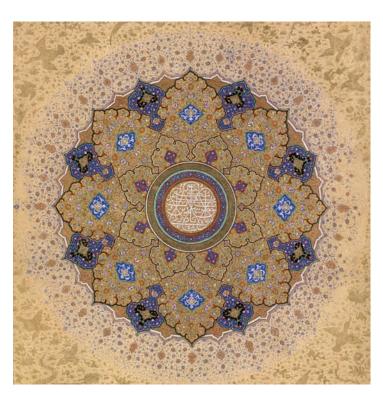
Symmetry and Asymmetry

Art has taken many forms throughout its history, but the basic solutions to the problem of composition have remained surprisingly stable. Three basic methods of maintaining balance—symmetrical balance, radial balance, and asymmetrical balance—have proven effective. In symmetrical balance (sometimes known as bilateral symmetry), there is a general equivalence of shape and position on opposite sides of a central axis; if folded in half, the forms would match. With minor exceptions like the position of our hearts, all humans are designed to be bilaterally symmetrical. Ancient Cycladic idols (3-6) illustrate the special qualities of symmetrical balance. Their smooth, simplified forms and perfect symmetry provide a sense of calm and order—qualities appropriate to images of the "mother goddess."

When all elements revolve around a central point, **radial balance** is created. The whole world seems to pivot around the center in *Shamsa* (3-7) or "sunburst," which draws our attention irresistibly.



3-6 Cycladic idol, Syros, c. 2500–2000 BCE. Marble, 8½" high. National Archaeological Museum, Athens.



3-7 Ex Libris page from an album *Shamsa* ("sunburst" inscribed with the titles of Shah Jahan), c. 1640, colors and gilt on paper, $15\frac{3}{6}$ " \times $10\frac{7}{6}$ ". The Metropolitan Museum of Art, New York (purchase with Rogers Fund and The Kevorkian Foundation Gift, 1955).

The elaborate and beautiful details combined with the sumptuous use of gold paint creates a heavenly image, similar to the **mandalas** that Buddhists use for meditation. The titles of the Indian shah who sponsored this work (and built the Taj Mahal) are inscribed in the calligraphy at the center, along with the words, "May God make his kingdom last forever!"

In many cultures the circle is considered a perfect form. The Renaissance architect Donato Bramante's *Tempietto* (3-8) is based on a series of pure circular elements sharing the same center. From the stairs to the cylindrical columns to the dome and its cupola at top, circular forms of countless kinds are arranged with extraordinary imagination. By utilizing radial balance to organize his building, he created a sense of order and rationality. Meant to be admired as a representation of ideal forms and divine balance, the *Tempietto* is more a symbolic building than a functional one. Conducting a church service inside is practically impossible, because the interior is actually only fifteen feet wide.

Unlike symmetrical or radial, **asymmetrical balance** is much more dependent on an intuitive

balancing of visual weights. The parts do not revolve around a center or form a mirror image around an axis but can be positioned anywhere and be any size. Unlike symmetry, which is basically fixed and static, asymmetry is active. So, while it is more challenging to balance an asymmetrical artwork, when achieved, the equilibrium will be much more dynamic than in symmetrical or radial compositions. The twisting and turning forms in Pieter Paul Rubens's (and Frans Snyders's) *Prometheus Bound* (3-9) create a sense of violent movement. This is a portrayal of the Greek mythological hero who stole fire from heaven and gave it to mankind. As a punishment, Zeus chained him to a mountaintop where he was endlessly tortured.

EMPHASIS

Emphasis in a work of art is essential for its success; if every part is of equal value, either confusion or monotony will numb the viewer. Prometheus Bound provides a good study of ways to create emphasis: relative size, lines of force, focal point, and contrast.



3-8 Donato Bramante, *Tempietto*, 1504 (?). San Pietro in Montorio, Rome.



3-9 Pieter Paul Rubens (and Frans Snyders), *Prometheus Bound*, 1611–1612. Oil on canvas, 95 %" × 82 ½". The Philadelphia Museum of Art (W. P. Wilstach Collection).

While the picture was a collaboration, the brilliant design of the composition was by Rubens (see Chapter 15). Snyders, an expert on animal subjects, painted the magnificent eagle. The eagle and Prometheus are obviously the main characters because of their great *relative* size compared to all of the other elements. The main thrust or *line of force* in the picture is the diagonal body of Prometheus, which is falling toward the viewer. The eagle that swoops down from the right creates an opposing diagonal that crosses Prometheus at his bloody

liver, which is torn out every day. The crossing lines of force *emphasize* the cruel act, making it the *focal point* of the picture. Lines that converge on one location are a powerful artist's tool. They irresistibly draw the eye of a viewer. In a picture of this complexity, it is especially important for the artist to control the viewer's gaze, to choose which parts dominate. To make doubly sure that the main subject is the center of our attention, Rubens also bathes it in a bright light that *contrasts* with the general darkness.

Unity and Variety

A radial image like the *Shamsa* or a symmetrical sculpture like the Cycladic idol has a strong sense of **unity** or coherence. Unity is created by repetition of shapes, textures, patterns, or colors. While no work of art can succeed without it, unity alone is unlikely to sustain the interest of a viewer. The challenge for a designer is to balance unity with variety.

In the painting *Prometheus Bound*, there is plenty of variety. We see the contrasting areas of light and dark, many different textures, and items of different sizes. Tension is created by the precarious visual balance and the violent subject. With all the variety, how did Rubens prevent total chaos and preserve a sense of unity? While it is not readily apparent because of the complexity of the action, Rubens used *repetition*. Throughout the canvas, circular lines and shapes are repeated over and over again. The curves of Prometheus's muscles, the wings and neck of the eagle, the leaves, the rocks, the chains, and even, if we could see the original, the brushstrokes share the same form.

Unity and repetition are much more apparent in an installation by the contemporary artist Tara Donovan (3-10). Almost one hundred thousand identical Styrofoam cups are arranged by the artist to form a cloud-like shape that hovers over the gallery space.

While most other sculptors use ordinary materials for planning purposes only, Donovan uses commonplace materials as her medium. She prefers stuff like pencils, paper plates, or toothpicks over expensive artist materials like marble or bronze because they create "a very real physical connection to the work" with viewers. What could be a totally unified but terribly boring sculpture is given exceptional variety by the artist's imagination. This installation also takes different forms depending on the location. Donovan believes that each work should grow based on the specific qualities of light and space of a site, as well as the nature of the material she uses.

A more subtle use of repetition can be seen in the interior of the Pantheon in Paris, designed by the Baroque architect, Jacques Germain Soufflot (3-11). One can easily see how a series of similar shapes being repeated (in this case arches) creates a sense of **rhythm**. Rhythm is very satisfying. Our breathing, our heartbeat, the sound of waves breaking on a shore—all of these things soothe us because of their orderly repetition. While a hiccup can be startling, in art some variation in rhythm is necessary to avoid monotony. Soufflot's design does this by interspersing domes of varying heights between the archways. He also fills open areas with different patterns, which are the simplest form of repetition. Patterns are created by evenly distributing a shape



3-10 Tara Donovan, Untitled, 2003. Styrofoam cups, hot glue, size variable. ACE Gallery, New York. Photograph by Raymond Meier. Courtesy of ACE Gallery, Los Angeles.

3-11 Jacques Germain Soufflot, Pantheon (Sainte Geneviève), Paris, 1755–1790.

over a surface. They are instantly seen as a unified field; after looking at one part, one never examines the other parts separately. In the Pantheon, a sense of orderliness because of the repetition of forms is combined with a sense of opulence because of a richness in surface decoration.

Harmony is another important way to unify a composition, and harmonious is a good word to describe the impression made by Georgia O'Keeffe's Tivo Calla Lilies on Pink (3-12). Her painting demonstrates the two ways harmony can be created. The first is by the sympathy of the forms, often a byproduct of repetition. The soft curvilinear shapes are repeated just as often as the curves in the Rubens, but here they seem to almost nuzzle each other. That is because there are very few hard contrasts; all shading is done gradually and gently. Colors also can create harmony. Red and green colors usually clash,



3-12 Georgia O'Keeffe, *Two Calla Lilies on Pink*, 1928. Oil on canvas, 40" × 30". Bequest of Georgia O'Keeffe for the Alfred Stieglitz Collection, 1987. Philadelphia Museum of Art, Philadelphia, Pennsylvania, U.S.A.

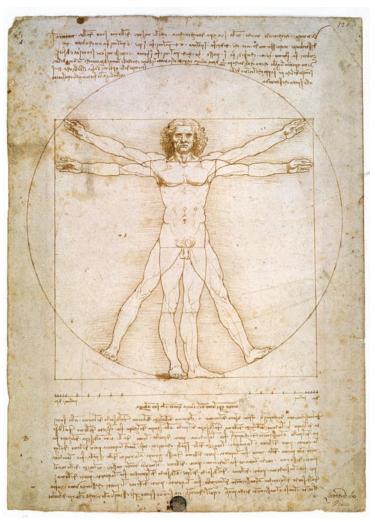


but notice how O'Keeffe harmonizes those colors by adding white to them, using pastel versions. The most intense color is yellow-orange, a color that works well with the others but is still strong enough to provide the two focal points of the picture. Their verticality against the generally horizontal elements elsewhere also help draw our attention to them.

Proportion and Scale

O'Keeffe's painting is more than three feet high, much bigger than any calla lily flower. By enlarging the blossoms, or changing their **scale**, we see them in a new light and can understand the abstract beauty of their structure. **Proportion** and scale are related because they both refer to size, but they do not mean the same thing. Proportion compares the parts of one thing to each other. Scale has to do with the relation between something and a constant, for example the size of an average person.

The quest for ideal proportions has been pursued for centuries. Many societies have believed that these proportions would be a window into divine order. The Roman architect Vitruvius believed that the proportions of human beings were such a window and that all buildings should be built with those proportions in mind. He came to this conclusion after observing that a man with his arms and hands extended would fit into the two most perfect geometrical shapes—the circle and the square. Leonardo da Vinci shared Vitruvius's belief and also believed that scientific study of the functions of our bodies would ultimately reveal the workings of the whole universe. He wrote, "Man is the model of the world." In one of his notebooks, he drew the famous image of Vitruvian Man (3-13), which updated Vitruvius's theory. Unlike the Roman architect, da Vinci had



3-13 Leonardo da Vinci, *Vitruvian Man*, c. 1490. Ink and watercolor on paper, 13 ½" × 95%". Gallerie dell' Accademia, Venice.

actually done measurements of human beings and learned that the square and circle would not be able to share the same center. Notice how da Vinci shifts the square down from the circle's center.

Vitruvius was preceded in the search for ideal proportions by the Ancient Greeks. Their concept of the *Golden Mean* (sometimes called the *Golden Proportion, Ratio,* or *Section*) was the guiding principle for the designs of their greatest buildings like the Parthenon in Athens. By tradition, Pythagoras is credited with the discovery of the ratio. Some believe this ideal preceded the Greeks and that one can see the ratio in the Pyramids of the Ancient Egyptians. Others have claimed it was used in Ancient India.

This Golden Ratio can be determined in several ways, the simplest being to place a small rectangle and square together, thereby forming one big rectangle. When the proportions of the smaller rectangle equal that of the big overall rectangle, then it is the Golden Mean. The mathematical formula is a/b = b/(a+b) or numerically 1:1.618. The Greeks simply referred to it by using the letter phi. As complicated as the formula may seem, admiration for buildings built with it has been nearly universal. Renaissance architects based their buildings on the Golden Mean. Even contemporary surveys have found that people prefer designs based on the Golden Mean compared to any other system of proportions.

For artists, however, proportions do not always have to be ideal. The impact and meaning of Alberto Giacometti's *Walking Man II* (3-14) is based not on perfect proportions but in its difference from the normal proportions of man. It is part of a series that occupied the sculptor for decades. His figures are so thin that they hardly exist at all. They are faceless. Moving along without grace, it seems to take all the effort their skin and bones can muster to drag along on large heavy feet, almost rooted to the earth. Through their unique proportions, therefore, they speak about the fate of modern man—anonymous, exhausted, and feeble, soon to be buried in the ground.

As with proportions, changes in scale are meaningful in art. The Ancient Egyptians used hierarchical scale in their works to show the relative importance of the individuals portrayed. In *Chest of Tutankhamen with Hunting and War Scenes* (3-15), a painted chest found in his tomb, the famous pharaoh is hunting both lions and his enemies. Behind him are the other members of the hunting party, but their heights are no more than one-third of his because of their lower status. The targets of his arrows—the lions and his enemies—seem even more insignificant in compari-



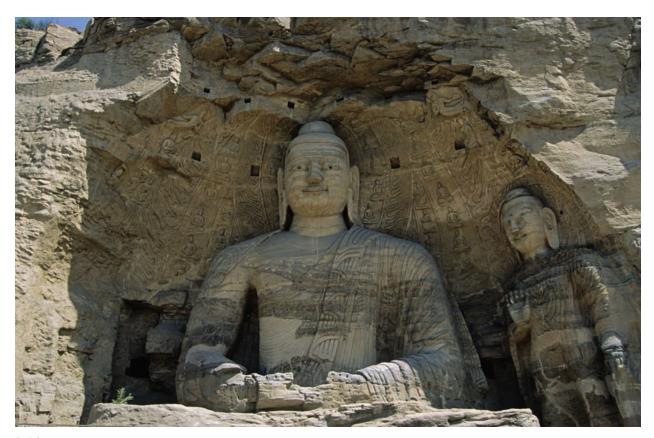
son to Tutankhamen. The use of hierarchical scaling is not unique to the Ancient Egyptians and has been used in cultures around the world. Examples can be found in Medieval, Assyrian, and Benin relief sculptures (13–26, 9–2, 9–3), as well as Renaissance altarpieces.

"Larger than life" is a common expression that means something is larger than an average person or large scale. Anything that large tends to attract our attention (see box). Religious buildings and shrines are often built on a majestic scale, either to impress a god with the people's devotion or to impress a people with the greatness of their god. Gothic cathedrals, Greek temples, and Islamic mosques all follow this idea of the power of enormous buildings, but few temples and statues (it is both) can compare to the forty-five-foot-tall Colossal Buddha of China (3-16), which was carved out of solid rock. Believers go inside the Buddha to worship at elaborate shrines at human scale, but the exterior's scale explains why viewers come away with a sense of an all-seeing and powerful god. If this statue were only three inches tall, the effect would be entirely different.

3-14 Alberto Giacometti, *Walking Man II*, 1960. Bronze, 188.5 cm \times 27.9 cm \times 110.7 cm (74½" \times 11" \times 43½"). Gift of Enid A. Haupt. 1977.47.7. Image © 2007 Board of Trustees, National Gallery of Art, Washington, DC.



3-15 Chest of Tutankhamen with Hunting and War Scenes (side), c. 1323 BCE. Egyptian Museum, Cairo.



3-16 Colossal Buddha, Cave XX, Yungang, Shansi, China 450-500. Stone, 45' high.

Pipilotti Rist's video installation, Selfless in the Bath of Lava (3-17), explores just that possibility. Her work is easy to miss in a gallery or museum because Selfless is just a few inches in size and is not hung on a wall. The sound of a woman's faint but desperate cries causes viewers to pause and search for its source. The hunt leads downward. The cries come from a small, jagged hole in the floorboards. Just beneath the hole is a three-inch video of a nude woman (the artist) that can only be seen by squatting down. She is trapped in glowing, fiery lava. Pale and white-haired, the damned woman reaches up and screams. Pleading, she yells in several languages, "You would have done everything better. Help me. Excuse me."The scale of the video changes each viewer, making him or her a giant, all-powerful being with the fate of this poor woman placed in their hands.

Quite the opposite effect is created by the scale of Robert Therrien's *Under the Table* (3-18). While the sculpture depicts a completely ordinary subject—a wooden table and chairs—their huge size takes the

ordinary into the realm of fantasy. Scale, as stated earlier, is based on a frame of reference, often the size of a human being. Without the people in the illustration, we would assume it was a photograph of a dining room set taken from a low point of view. In fact, the idea for this sculpture came while Therrien was taking photographs of his own furniture. Because we can see the people, we understand that the table is gigantic, nearly ten feet tall. When visitors walk under the table, the effect is like being transported back in time—to a point-of-view we had when we were babies.

A more disturbing vision of infancy can be seen in David Siquieros's *Echo of a Scream* (**3-20** on page 70). Here scale and relative size is used to intensify this vision of the effect of poverty on the young. The enormous duplicate of the baby's head amplifies the power of the scream. The baby's body, however, seems weak and helpless because of its relation to the mass of surrounding garbage. Shapes in the foreground in another context might remind us of bent paperclips, but compared to the baby, they are twisted, broken pipes.

3-17 Pipilotti Rist, *Selbstlos im Lavabad (Selfless in the Bath of Lava)*, 1994; audio video installation by Pipilotti Rist (video still). Courtesy the artist and Hauser & Wirth, Zurich/London.





3-18 Robert Therrien, *Under the Table*, 1994. Wood and metal, $117'' \times 312'' \times 216''$ overall. The Broad Art Foundation, Santa Monica, California. Photography: Douglas M. Parker Studio, Los Angeles.

RT NEWS Scale on Trial: The Tilted Arc Controversy

n the 1980s, a sculpture in which no one could find any sexual, political, or even representational content became controversial just because of its scale and placement. The ultimate fate of Richard Serra's *Tilted Arc* (3-19), an outdoor sculpture commissioned by the federal government, would take nine years of bitter debate and court battles to resolve. During that time, it became a lightning rod for discussion about government-supported art and the rights of artists versus the public.

In 1979, Richard Serra, a Minimalist sculptor, was chosen by a panel of experts to design a sculpture for a plaza in front of a federal building complex in New York City. Serra is a well-known and critically acclaimed sculptor who had already designed sculpture for plazas in Berlin, St. Louis, Barcelona, and Paris. Serra's New York commission was part of the "Art in Architecture" program supervised by the General Services Administration (GSA) of the federal government. This program sets aside one-half of 1 percent of the monies allocated for new federal buildings toward the purchase of public art designed for the site. At the time of the commission, the federal buildings were already completed. The semicircular plaza in front of them already had a fountain at its center and was regularly traversed by thousands of federal employees.

After many consultations with engineers and the design review board of the GSA, the chief administrator of GSA in Washington, D.C. gave Serra the go-ahead for his design. It was completed and installed in 1981 and greeted with immediate hostility. *Tilted Arc* was both tall and menacing, graceful and impressive. Constructed of Cor-Ten steel (which is used for bridges) 12 feet tall and 120 feet long, it swept across almost the entire plaza between the fountain and the entrance. The sculpture formed a very gradual arc that crossed and balanced the opposing curves of the circular paving stones of the plaza. The wall of steel also tilted at a slight angle toward the central building.

Serra had decided not to embellish the fountain and buildings but to alter the whole experience of the plaza. "After the piece is created," Serra said, "the space will be understood primarily as a function of the sculpture." In other words, he wanted to make his sculpture the focus of the entire area. He succeeded in fulfilling his intention, but with a reaction he never imagined. Workers dubbed the new sculpture "the Berlin Wall of Foley Square." Instead of walking directly across the plaza as they had in the past, they were forced to walk around the sculpture. Rather than confronting and contemplating the artwork as Serra hoped they would, the workers were simply irritated by its placement. While it made a strong abstract composition when seen from the building's windows at ground level, it also blocked their view of the fountain. Angry letters flooded local newspapers and magazines, and thirteen hundred employees at the federal complex signed a petition demanding its removal.

In 1985, the head of the GSA's New York office organized three days of public hearings on the *Tilted Arc*. Testimony was heard from office workers who described the sculpture as "garbage," "an irritation," "rusted junk," and "hideous" and demanded its removal. It was clear that no one had considered consulting the occupants of the Federal Plaza, even though they would have to live with the sculpture every day. Museum curators, art scholars, critics, and artists testified in favor of the work. It was

ART NEWS

suggested that the GSA put some effort in "building public understanding" of the art it had commissioned. Serra attempted to explain his sculpture to the public:

Tilted Arc was constructed to engage the public in dialogue....The sculpture involved the viewer rationally and emotionally....The viewer becomes aware of himself and his movement through the plaza. As he moves, the sculpture changes. Contraction and expansion of the sculpture results from the viewer's movement. Step by step, perception of not only the sculpture but the entire environment changes.

The judgment of the panel was that the sculpture should be removed. Shocked at first, Serra responded with a \$30 million lawsuit, charging that the GSA had deprived him of his constitutionally protected rights of free speech and due process of law, along with breaching his contract. Serra argued that his contract called for a permanent sculpture. He had designed it specifically for the site, so it would not work in the same way in any other location. Its removal would destroy it. A judge ruled in 1987 that since the GSA had purchased the sculpture from Serra, he had no further rights connected with it. It was up to the government whether to keep it in the plaza, move it, or destroy it.

In March 1989, in the middle of the night, construction workers used jackhammers and cranes to disassemble the *Tilted Arc*. Broken into three pieces, the remains of the sculpture were taken to a city parking area and stacked while the GSA said it was looking for another site. Serra publicly announced that he would never cooperate with the government in its search. *Tilted Arc* was never seen again.

Because of the controversies surrounding his work, Richard Serra would likely agree that artists can no longer trust the commitment that the government makes for permanent displays of art. If an artist must fear immediate public outrage, isn't it likely that he or she will use safe, conventional approaches to commissions rather than ambitious ones? Will caution decorate our public places instead of imagination? The judge's ruling was particularly unsettling to artists. Can the government destroy any of its thousands of artworks?

On the positive side, awareness of the need to involve the general public in decisions on public art has increased. The GSA has instituted new policies that reflect the need for social responsibility in the designs it chooses. Artists are not given commissions after sites are finished but work with the architects during the planning stages. Concerned citizens are also invited into the planning process. Education of the community is considered an integral part of any plan to bring art to civic places.



3-19 Richard Serra, *Tilted Arc*, 1981. Hotrolled steel, 120' long. Federal Plaza, New York.



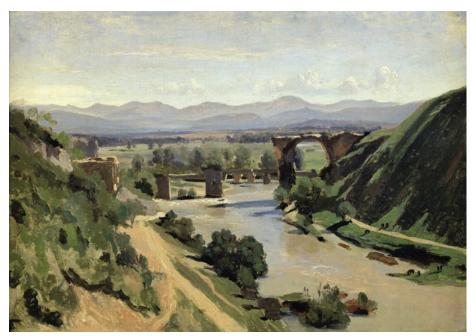
3-20 David Siquieros, *Echo of a Scream*, 1937. Duco on wood, 48" × 36". The Museum of Modern Art, New York (gift of Edward M. M. Warburg).

DESIGNING AND ORGANIZING SPACE WITH DEPTH

By changing the relative size of objects, Siquieros is also able to create the illusion of the third dimension, or *depth*. The dump where the baby was abandoned appears to go on forever, making the baby's predicament seem even more hopeless. We read the space as deep because we tend to perceive large objects as closer to us than small ones. We have all seen photographs where people in the distance are much smaller than those closer to the camera. If one of the subjects reaches out at the camera to block out the image, the size of the hand seems enormous compared to the relatively tiny figures. In Siquieros's painting, the pipe-like shapes get smaller and smaller from the bottom to the top of the picture. The large head at the top makes them seem even farther behind.

To create a sense of extremely deep space, artists for thousands of years have used **atmospheric perspective**, which is based on the effect our atmosphere has on things seen at a great distance. Even the most farsighted among us have difficulty seeing distant forms as clearly as those near to us, because the forms tend to get paler. Siquieros uses this effect, too, to accentuate the depth of his picture.

Atmospheric perspective can also add to the beauty of an image. If you look across any landscape, as Corot did while painting *The Bridge of Augustus over the Nera* (3-21), the distant mountains lose their true color and begin to disappear into the blue of the sky. Imitating nature, Corot created the illusion of deep space by progressively diminishing detail and blurring objects in the painting the farther they are from the foreground. Corot's keen sensitivity to changes in color while painting directly from nature allowed him to take advantage of another characteristic of atmospheric perspective as well. Notice how



3-21 Jean Baptiste Camille Corot, *The Bridge of Augustus over the Nera*, 1826. Oil on canvas, 18¾" × 13¼". Louvre, Paris.

the painting uses warmer colors in the foreground and cooler ones toward the mountains. Because distant forms become bluer or cooler, we tend to assume that warmer colors are closer to us. Corot's use of a warm, clay color in the foreground and cool blues and violets in the distant mountains accentuates his picture's depth.

One of the simplest ways to achieve the illusion of depth is by overlapping shapes, so that one seems to be in front of the other. In Hiroshige's color woodcut Maple Leaves at the Tekona Shrine (3-22), the leaves that hang down at the center help create the illusion that the mountains are far off in the distance. Other methods of implying space are used. Hiroshige understands that forms diminish as they get farther from the viewer. Notice how the subject of the picture, a religious shrine, is actually one of the smallest elements. It is the tiny wooden structure positioned just left of the center in the middle ground. It seems especially insignificant because of its contrast with the relatively gigantic branches and leaves across the top. The difference in their sizes helps give the illusion of great depth.



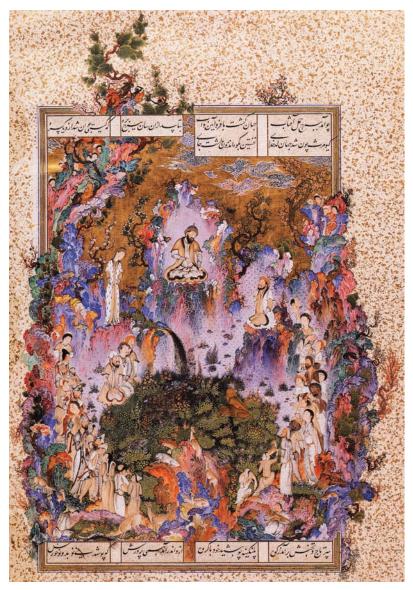
3-22 Utagawa (Ando) Hiroshige, *Maple Leaves at the Tekona Shrine*, Mamma, 1857. Color woodcut, 13¾" × 9¾". Brooklyn Museum of Art (Gift of Anna Ferris), New York.

Because the branches, leaves, and cliffs are cut off by the edge of the picture, a great deal of *implied space* is also created. Because we are very familiar with photography, we are not surprised to see parts of subjects *cropped* at the border. However, Western artists of the 1800s were astonished and very excited when the first Japanese prints using this technique arrived in Europe. Before then, with the exception of portraits, all elements were neatly composed within the picture plane, rarely touching a border. Implying that forms continue past the edges is a very effective way to suggest deep space without resorting to conventional linear perspective.

In Persian illuminated manuscripts, such as *The Court of Gayumars* by the Sultan Muhammad (**3-23**), creating a beautifully designed and meaningful pic-

ture is more important than the illusion of threedimensional space. Notice how most of the figures are the same size no matter how distant they are supposed to be from the viewer.

Depth is implied in other ways. We can tell which figures are meant to be behind others when they are overlapped. In the Persian tradition, as well, closer forms are placed toward the bottom, the more distant toward the top. This particular painting shows the legendary first king of Iran with his court. Sitting on his mountain throne, the king seems to float in a lavender haze. His importance is established by his isolated position in the top center, while the members of his court are crowded together at the bottom and sides of the page. It is worth noting that this picture was painted by a sultan. Artistic accom-



3-23 Sultan Muhammad, *The Court of Gayumars*, detail of folio 20 verson of the Shahnama of Shah Tahmasp, from Tabriz, Iran, c. 1525–1535. Ink, watercolor, and gold on paper, full page approx. 1'1" × 9". Aga Khan Trust for Culture, Geneva. (2005.1.165; M200).

plishment was admired by the great princes in Persia, many of whom, like Sultan Muhammed, were given formal art training.

LINEAR PERSPECTIVE

Because the artists wanted to keep the viewer's focus on Gayumars, they arranged the figures on each side in curving diagonals that pointed at the king. Today, we would read those lines as attempts to create **linear perspective.** This more mathematically precise form of perspective was unknown at the time in Persia, but had been discovered about a century earlier by the Italian Renaissance sculptor and architect Filippo Brunelleschi. It has evolved over time into the principle means of creating the illusion of the third dimension.

In his experiment, Brunelleschi studied the reflection of a building behind him (the Florence baptistery—a building that would loom large in his career; see Chapter 14) on a flat mirror. He then carefully painted the mirror image on a board that had the same proportions as the mirror. By copying this image faithfully, he was able to recreate the image in perspective.

Brunelleschi had a flair for the dramatic; to reveal his new discovery, he arranged an elaborate demonstration. A hole was drilled through the painting's center. Friends were told to look through the hole from the back and hold a mirror in front of them so they could see the picture. Brunelleschi turned them so they were facing in the direction of the original building. When he told them to lower the mirror, they could see the real building and were shocked to see it was identical to the painting.

Brunelleschi had discovered the rules of onepoint perspective. He noticed that all parallel lines in the direction of the object being viewed converge at one point in the distance. You may have seen the same thing looking down a highway or railroad tracks. This is the rule of convergence. The point where the lines end is called the **vanishing point**. It is exactly at your eye level or horizon line. You may have noticed that at the beach, the horizon is identical to your eye level. If you look out across the water and move your head (eye level) up and down, the horizon will move up and down, too. The whole effect of a picture is determined by the choice of the eye level. As you might imagine, the view of a table is quite different for a basketball player and a toddler. Visually, they could be two different tables. Brunelleschi, aware of the impact of eye level, made sure when he drilled his peephole that those who viewed his painting were at the same eye level he had been when he painted it.

Because linear perspective can organize what we see in a logical, coherent way, its discovery was greeted with great enthusiasm by Renaissance artists. Piero della Francesca's *View of an Ideal City* (3-24) is one of many works in the 1400s that explores the new method. It is not hard to identify the central vanishing point; the artist has the lines of the plaza and the sides of the buildings all pointing in its direction.

The sides of these buildings also demonstrate a special characteristic of linear perspective. Their size shrinks as they increase in distance from the viewer. In reality, the buildings have square corners on all sides and are rectangular, but visually we see **foreshortening** taking place, their forms diminishing as they move away from the eye. Foreshortening can produce seemingly unnatural distortions of familiar forms.



3-24 Piero della Francesca, View of an Ideal City. Galleria Nazionale delle Marche, Palazzo, Ducale, Urbino, Italy.



3-25 Georges Braque, *Violin and Palette*, (Violon et palette) autumn 1909. Oil on canvas, $36 \frac{1}{8}$ " \times $16 \frac{7}{8}$ ". Solomon R. Guggenheim Museum. 54.1412.

A Modern Way of Seeing: Cubism and Nonperspective Space

As realistic as linear perspective seems, it is not really a recreation of the way we see. It actually is based on a fixed viewpoint, one eye (not two) looking in one direction only, with neither the head nor the eye moving. It is a good approximation of the view of a one-eyed cyclops who is totally paralyzed—not a bad description of a camera but unlike most human beings.

By the beginning of the twentieth century, many artists felt that in a modern world, a modern way of seeing art was needed. Linear perspective seemed limited and a hindrance to progress in art. While more conservative artists might admit it was a lie, they could also show that, over centuries of use, it had proved to be a very useful one. The challenge for modern artists was to develop a new method of organizing space.

In Paris, two young artists, Georges Braque and Pablo Picasso, did just that. Their approach would come to be known as **Cubism**, although it was not, as the critic who named the movement thought, really a method based on simplifying forms into solid geometry. Cubism was a more profound change than that would have been; it was a fresh look at the world, opening up new ways to organize space.

Despite its confusing look, in some ways Braque's Violin and Palette (3-25) presents a truer "picture" of the way we actually see than View of an Ideal City. When we look at a still life, we do not stand riveted to one point, not moving a muscle, not even our eyes. We certainly do not use only one eye. Instead we look at a scene like this—bit by bit, moving our head, looking around. Our sense of the table and its objects is constructed from the many snapshots we take.

Cubism is also built from a collection of observations. In Braque's painting, the violin (like all the elements in the still life) is seen from several angles at once, revealing more than any single viewpoint could. Each part comes forward to be observed and each is equal in importance; there is no conventional foreground and background. The result is a significantly shallower space compared to linear perspective. The designer in Braque arranged the different parts into a dynamic composition of angled planes. At the top of his picture, Braque "hammered" a nail painted in conventional perspective, as if it held his painting up on the wall. It is a joke, but it is also a message

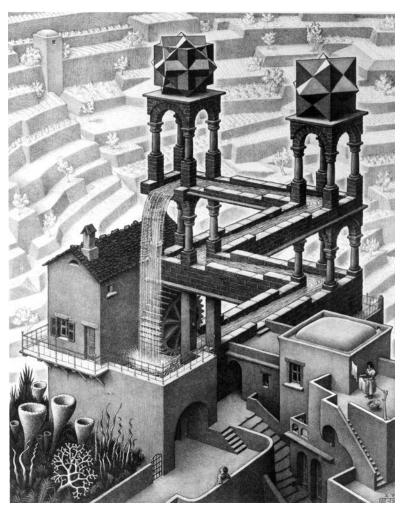
that the old perspective is now just one among many perspectives available to artists.

As modern as Cubism seems, most cultures throughout history have employed an essentially flat treatment of space. Even in the West, linear perspective is a relatively recent phenomenon. Medieval, Japanese, Indian, Chinese, and even ancient Greek art do not use linear perspective.

Our belief in mathematical perspective as a representation of the real world and the correct way to organize depictions of it can actually betray us. Used unconventionally, it can create seemingly natural worlds that are actually completely impossible. M. C. Escher, a Dutch artist, utilized apparently logical methods in many of his pictures to produce startling results. *Waterfall* (3-26) seems at first a straightforward depiction of a mill that uses a waterfall for power. On closer examination, we see that the waterfall has no source.

The water is able to feed itself in a never-ending cycle, to rise after it falls and ignore the force of gravity. Escher's spatial construction takes advantage of our easy acceptance of the illusion of linear perspective. The marvelous absurdity of the scene is fascinating, but perhaps ultimately disturbing because one is forced to distrust what was once taken for granted. What else do we believe in that is not true?

All artists work with the elements of art and produce works affected by art's underlying principles, but it would be a mistake to think that artists are always conscious of these rules. At times the art process is intuitive, and analysis comes later. Conscious decisions do have to be made when beginning a work of art about what materials and techniques an artist will use for his or her conception. Those materials and techniques are discussed in the next chapters.



3-26 M. C. Escher, *Waterfall*, 1961. Lithograph, 15" × 11³/4". Private Collection. © 1961 M.C. Escher Foundation-Baarn-Holland. All rights reserved.

CHAPTER Drawing

good craftsperson knows what materials and tools are appropriate to the job ahead, and this is also true for any artist. In fact, many of the materials and tools used by artists are also used by carpenters and construction workers. Artists use paper, paint, steel, and fabric; chisels, hammers, cameras, and welding torches. Artists' materials, like oil paint or clay, are referred to as **media.** Each **medium** has its own unique characteristics, demanding the knowledge of special techniques and requiring specific tools. The tools

and materials artists use can influence the creation of an artwork just as much as historical and social factors. By learning about them, we will discover another way to understand art.

For most of us, drawing is the way we first experienced making art. From the first scribbles of a child to the sophisticated rendering of an adult, drawing is also the most common measure of artistic talent. In many people's minds, the wildest, most abstract artworks cannot be viewed seriously without first knowing whether an artist can draw. For them, drawing means the capability of recreating objects in the visible world accurately with a pencil. While this is a limited use of the word, many artists have shared this view. Many have also believed that drawing is the foundation for all art. For example, the great nineteenth-century draftsman, Jean-Auguste-Dominique Ingres, told the young artist Edgar Degas (see Chapter 17), "Draw lines, lots of lines, and you will become a good artist."

4-1 Rogier van der Weyden, *Head of the Virgin*, c. 1455. Silver nib on prepared paper with light applications of red to the lips and cheeks, $5\frac{1}{4}$ " × $4\frac{1}{2}$ ". Louvre, Paris.

Drawing *is* important for just about every artist. Whether a painter, sculptor, printmaker, designer, or architect, every artist draws. Many artists cannot imagine a day passing without drawing even under the worst of circumstances (see box). A drawing can be a way to plan a work in another media, or simply a way to play with ideas. Sketches range from studies of forms in nature to copies of another artist's work, but a drawing can also be a finished picture by itself. Drawing is not limited to using ordinary pencils on white paper. A variety of tools and materials fall under the category of drawing.

GRAPHITE

The most common instrument for drawing is a graphite, often inaccurately called "lead," pencil. The term "lead pencil" persists as a reminder of the drawing tool graphite replaced in the late sixteenth century. For the previous two hundred years, artists who were interested in pure, precise lines had used **metalpoint**, which was actually a thin metal wire in a holder. While silver was the preferred metal, other metals including lead were also used. Rogier van der Weyden's *Head of the Virgin* (4-1) is an example of the delicate beauty of metalpoint drawings. Because it is made with the scrapes of light-colored metal on pale paper, a vision of the Virgin Mary appears to have materialized rather than to have been drawn.

Graphite sticks became a favored drawing tool after 1560, when the finest graphite in Europe was discovered in a mine in Cumberland, England. More and more artists were attracted to the advantages of the new material. While metalpoint produces delicate lines that are fairly light, graphite is able to make similar lines and bold, dark, dramatic ones. It is also more conducive to creativity, because metalpoint lines are nearly impossible to remove, but graphite lines are easily erased. Graphite permitted a less methodical and more experimental kind of drawing.

Graphite *pencils* were first created when the splendid English graphite was in short supply on the European continent during a war in the 1750s (in fact, it was considered so valuable there was concern about an invasion of graphite-deprived French artists). An inferior grade of graphite was ground into a powder and compressed into rods. The rods were slipped into wood cylinders, usually cedar. Even though the graphite deposit was mined out in the 1800s, graphite sticks continue to be used today. However, the

less messy pencils have become the most popular drawing tool of artists and art students.

Few, if any, artists have ever displayed greater mastery of graphite than the nineteenth-century Frenchman Jean-Auguste-Dominique Ingres. His stunning portrait of his wife, Madame Delphine Ingres (4-2), shows in its delicacy the influence of metalpoint drawings by the great masters he so admired. But the variety of tones and widths in Ingres's lines are unique to graphite. Notice how one line will change its weight, beginning thin and almost invisible, gradually thickening, then thinning again. These subtle changes require tremendous skill and produce a convincing illusion of three-dimensional form within one line. In addition to superbly crafted lines, Ingres also creates soft tones that add to the illusion of solidity.



4-2 J. A. D. Ingres, *Portrait of Madame Ingres*, 1855. Graphite on white wove paper, $13\frac{3}{4}'' \times 10\frac{3}{4}''$. Courtesy of the Fogg Art Museum, Harvard University Art Museums (gift of Charles E. Dunlap).

RT NEWS The Lost Drawings of Michelangelo

hen the team of restorers and art historians entered the small, underground room, it was filled with debris. Bags of lime and broken bricks covered the stone floor. There were even human remains, probably from one of the plagues that haunted Florence, Italy, in the fifteenth and sixteenth centuries. The walls were bare and white.

The team was hoping to solve a four-hundred-year-old mystery. Around 1530, the artist Michelangelo Buonarroti, already famous in Italy for his sculpture of David and the Sistine Chapel's ceiling, was forced to go into hiding. Imperial troops were hunting him because he had supported the recently crushed republic in Florence. Michelangelo wrote years later that he hid in a secret room below the tombs he had designed in the Medici Chapel, but no one had ever discovered what room he meant. The irony in his selection of a hiding place was that it was the Medici who had charged Michelangelo with treason and were searching for him.

The Medici family ruled Florence for most of the Renaissance, and their generous patronage of the arts and humanities was crucial to the rebirth of Italian art and culture during this period. They had been, in fact, the most important patrons of the young Michelangelo; he had even lived for a time in their palace. They must certainly have felt betrayed when he sided with those who overthrew them to establish a republic in Florence in the 1520s. Unfortunately for Michelangelo, the republic was short-lived, and by 1530 the Medici had returned to power and considered him a traitor.

As interesting as the mystery was, why was it important to the search team to locate Michelangelo's hiding place? Because they were really looking for hidden treasure. Besides mentioning a secret room, the artist had also written, "to forget my fears, I filled the walls with drawings." Was this true? The team felt sure it was. How could Michelangelo be locked up in a room alone for six weeks and not draw?

The room they discovered lay underneath the Chapel itself. The team had found some narrow stone steps under a trapdoor in the floor of a storage room. When they first entered the underground room, they could see that the walls were totally bare, but it would not be surprising if the master's drawings had been painted over. Even huge paintings by Michelangelo and da Vinci that had decorated the Medici palace in Florence were later covered up with works by other artists. The Renaissance princes liked to redecorate, replacing one wall painting with another, much like families today change wallpaper.

One member of the team noticed that along the far wall the floor's stonework appeared to be constructed of stones half the size of the others. The team realized that the back wall must have been a later addition. After getting permission to knock it down, the room became twice the size it had been. But, what about the drawings? For three weeks, the team fruitlessly made tiny borings (pinholes) in the walls and ceilings. But then, in the low curved ceiling that could be touched with an outstretched arm, one restorer made a boring that revealed some traces of charcoal. Could this be part of a charcoal drawing? Slowly, the whole group of restorers went to work.

ART NEWS

What they exposed after meticulously cleaning that part of the ceiling was a large drawing of a horse's head—clearly in a Renaissance style. With excitement, they began to work around the room. By the time the restoration team was finished, they had uncovered about fifty drawings, most of them quite large. It was astonishing and remains so today.

Michelangelo turned his hiding place into a sketchbook. The room is covered with charcoal drawings from ceiling to floor, many drawn on top of earlier ones. There are ideas for possible future projects. Others are memories of past masterpieces, such as sketches from memory of the head of Michelangelo's David (see 14-17), figures reminiscent of the Sistine Chapel's ceiling (14-18), and a life-size Christ figure. There is even a huge self-portrait. One can see the hand of Michelangelo—literally. In one place, where he hung his lamp, part of a drawing is marred by the black soot left by the lamp (4-3). You can see swipe marks across it where he apparently tried to rub off the dirty smudge on the wall. On the ceiling just above the dirty area, he must have rested his arm, because on it you can see the black fingerprints of Michelangelo.

Tourists today wander in awe around the Medici Chapel, admiring the splendid sculpted tombs Michelangelo designed for the Renaissance princes, unaware of another marvelous experience just a few feet below them. Unfortunately, the room is not open to tourists, because the moisture in the respiration of crowds would endanger the precious drawings. But among the lucky few who have been allowed to visit the secret chamber, the sight of the idle marks of a man who died more than four hundred years ago has brought more than one of them to tears.



4-3 Michelangelo, *Medici Crypt Drawing*, c. 1530. Charcoal. Sagresti nuova, San Lorenzo, Florence, Italy. © James Luciana.

CHARCOAL

After a stick tracing lines in the sand, charcoal is probably the oldest drawing medium. Prehistoric man used pieces of burnt wood to sketch on cave walls. Today, charcoal is manufactured in two ways. Stick or vine charcoal is made when wood is heated until only carbon remains. It is light and fragile, making lines and tones that are easily wiped away (even a good sneeze will erase parts of a stick charcoal drawing). Compressed charcoal is not as easy to erase and is made from ground charcoal compressed into short squared sticks. It is better at creating rich black tones. Because of its ease of application and removal, charcoal has long been a favorite of artists and students. In the Renaissance, it was used to draw preliminary outlines for paintings. A feather or dried bread was used to erase such charcoal sketches until only a faint hint of them remained.

More recently, artists like Käthe Kollwitz, in *Self Portrait* (4-4), have used charcoal for finished drawings. A dramatic range of dark and light shaded areas can be seen in her self-portrait. Fine lines made with a sharpened stick bring out the details of her face;

bold ones made with its side are used to delineate her body and help create variety. Together, they form an image of the artist at work, a combination of the discipline seen in her stare and underlying intensity evident in her body.

If one looks closely at the drawing, one can also see the *grain*, or texture, of the paper revealed by the lighter downward strokes. Surface texture is one of the distinctive characteristics of charcoal drawings and why artists who work in charcoal choose their papers carefully. We can see the grain because the raised fibers of the paper are catching and holding microscopic jagged edges of charcoal dust. To ensure a permanent bond, charcoal drawings must be sprayed with a **fixative** of shellac or plastic polymer.

CHALK AND PASTEL

Natural *chalk* is another drawing material that is soft and requires fixative to be permanently bonded to paper. It is often used along with charcoal. Like graphite, it is cut from the earth. A combination of



4-4 Käthe Kollwitz, *Self Portrait*. Drawing, 1933. Charcoal on brown laid Ingres paper, $18\frac{1}{4}" \times 25"$. © 2005 Board of Trustees, National Gallery of Art, Washington, D.C. (Rosenwald Collection).

minerals and clay, chalk was first used by artists in the Middle Ages. However, its real popularity began in the Renaissance when artists started working on large-scale projects. Metalpoint had worked beautifully on a small scale, but chalks could be used for huge drawings. At first, red chalk (sometimes referred to as *sanguine*) was preferred, but natural chalks of black, gray, and white were also used. Because of the compressed nature of the material, neat, clear lines could be made with it.

Jean Antoine Watteau used black, red, and white chalk in combination for his drawings of a young boy's head, *Three Studies of a Youth* (4-5). By rarely

blending the strokes of each color, but placing them side by side, the autonomous colors are more vivid. The drawing seems almost in full color rather than in just red, black, white, and gray. Because of the rich, bold darks of black chalk, a confident, freely executed effect is created.

It is said that Watteau kept the first modern sketchbook, because his was not a collection of preparatory plans for larger finished works but a collection of his current ideas and interests. Sometimes he would browse through old sketchbooks, looking for inspiration for a current project. In fact, these heads appear in several Watteau pictures painted years later.



4-5 Jean Antoine Watteau, *Three Studies of a Youth*, c. 1710. Sanguine, black, and white chalks and watercolor, $9\frac{1}{2}$ " \times 10 5%". Louvre, Paris.

Compared to Watteau's time, a much wider variety of colored chalks or **pastels** are available today. These fabricated chalks are a combination of loose, dry pigment and a substance that holds the pigment together, called a **binder**. Binders are used in all of the colored media and are what differentiate them. For example, oil paints are made from the same pigments as pastels, but they use oil as a binder. In the case of pastels, the pigment and binder form a paste that is rolled into a stick and then dried. A modern chemical product (methylcellulose) is used as a binder now, but in the past more ordinary materials were used such as beer, milk, honey, and sugar candy.

The range of colors available in pastels is as wide as in paints; in fact, pastel pictures are sometimes called "pastel paintings." However, Odilon Redon chose to work in pastels because of the special characteristics that differentiate them from painting. Control is simpler and more direct with pastels than any of the liquid media; the soft sticks of color are easily blended.

Even more importantly, because pastel is a dry media, it is closest to working with pure pigments; few media can show brilliant color better. In *Roger and Angelica* (4-6), Redon takes advantage of the radiance of pastels. Luminous clouds of color swirl across the surface of the paper, suggesting rather than describing the knight Roger on a winged horse, a sea monster, rising mist, towering mountains, the surge of water against rocks, and the tiny white figure of Angelica, writhing against her chains.

CRAYON

Artist's **crayons** also provide the artist with an extensive menu of colors but do not require fixative. Like children's crayons, they have a waxy or oily binder that adheres better than charcoal or pastel to paper. This does, however, make them more difficult to erase. Unlike children's crayons that fade quickly, artist's crayons use



4-6 Redon, Odilon (1840–1916) Roger and Angelica, c. 1910. Pastel on paper mounted on canvas, 36 ½" × 28 ¾". Lillie P. Bliss Collection. (111.1934) The Museum of Modern Art, New York, NY, U.S.A.



4-7 Albrecht Durer, *Six Pillows*, 1493. Brown ink on paper, 276 cm \times 202 cm. Metropolitan Museum of Art, New York.

more permanent pigments. **Conté crayon**, developed in the late 1700s, is one of the most versatile drawing materials. Like charcoal and pencil, it comes in a variety of degrees of hardness. Seurat's *L'écho*, seen in Chapter 2 (2–12), demonstrates conté's capacity to show subtle variations in tone. Because of the dense blacks that can be created with conté crayons, artists often use them when they want to model forms softly.

PEN AND INK

Pens have been in use since ancient times. The oldest pens were made from tall grasses gathered along lakes and streams, reeds in the West and bamboo in the East. Because these grasses are hollow, they can hold ink. Some artists today continue to draw with such instruments, which are prepared by cutting the grass stalks at an angle. The width of the point determines the thickness of the mark.

A more flexible and finer line is available from **quill** pens. Compared to reed or bamboo pens, they glide almost effortlessly on paper. A variation in the pressure applied to the pen will smoothly change a line's width. Quill pens have been popular since the Medieval period, when monks used them to letter manuscripts. They are made from bird feathers; goose quills are the most commonly used, but crow, turkey, or even seagull quills make fine pens.

Albrecht Durer's page of lively pillow studies (4-7) was most likely done with a quill pen. Durer was only twenty-two when he made this drawing, but already one can see the skill and inventiveness that would lead to his role as leader of the Northern Renaissance (see Chapter 14). By increasing or decreasing the downward pressure on his pen, Durer used the flexibility of quills to create many kinds of lines. To make his forms seem three-dimensional, he uses a technique called **cross-hatching**. In cross-hatching, series of parallel lines cross in a

netlike fashion as they describe the contours of the subject's surface. Notice that it is not necessary to cover the whole pillow with these lines to create solidity; crucial junctures, usually where the form is in shadow, are used. By narrowing or increasing the spaces between his lines, Durer could create differences in the relative darkness of the shadows at the same time he is creating volumetric (three-dimensional) forms. Volume is also implied by the varying width (or *weight*) of the lines. Quick gestural lines define the pillows' shadows in the brighter light, while heavy, powerful lines form the folds of fabric in the darker areas.

The versatility of pens made from natural materials can be seen in Vincent van Gogh's drawing of the abbey of Montmajour in southern France (4-8). Van Gogh would work outdoors on drawings like this, despite the strong sun, the wind, and the mosquitoes; this particular picture took a whole day to finish. Instead of concentrating on creating a sense of volume, van Gogh used his pen's ability to create a variety of marks to delineate the many textures in the landscape. The drawing's complexity is meant to reflect the infinite diversity of nature.

Manufactured steelpoint pens became available in the nineteenth century. *Nibs* with different points and angles are inserted into a holder, depending on the kind of line wanted. These pens are also respon-

sive to variations in the pressure of an artist's hand. Because they require no skill for cutting and have uniform quality, many artists today prefer them to reed, quill, and bamboo.

BRUSH AND INK

In the West, pencils and pens are familiar to everyone because of writing. In the East, however, writing is done with brushes. Handling a brush well is a highly prized skill. In the hands of a master, one wet, pointed brush can produce a delicate, fine line or a wide, dramatic stroke quickly and elegantly. The flexibility of a line made with a brush has been seen already in a drawing by Hokusai (2–3).

Modern Chinese and Japanese artists continue to be trained in centuries-old brush techniques, requiring years of study. One of their models is the fourteenth-century master, Wu Chen. His seemingly effortless strokes for the bamboo leaves were practiced thousands of times before his teacher permitted him to attempt one in a drawing. There were two reasons for such a long training period. First, a line made with ink cannot be changed or erased—one mistake and the drawing is ruined. Second, to be convincing, a long bamboo stalk has to be brushed on quickly with confidence. Any hesitation would be revealed, but in



4-8 Vincent van Gogh, *Hill with the Ruins of Montmajour*, 1889. Pen, 187%" × 23 ½". Rijksmuseum, Amsterdam.

Wu Chen's lovely *Bamboo in the Wind* (**4-9**), none can be found. Wu Chen also did the beautiful calligraphy on the right; it reads, "He painted and wrote with joy." The quote shows that for practitioners of this Eastern technique, the division between drawing and painting in Western art is meaningless.

WASH

The division between drawing and painting blurs even in the West when artists use washes—diluted ink applied with a brush to add tonal values to a drawing. Rembrandt was particularly adept at this technique. In *Woman at a Window* (4-10), he added several layers of wash on top of a pen drawing to give solidity to the form of the woman. By using a mixture of pale and dark gray washes, he was also able to describe the effect of outdoor light coming from the open window illuminating his subject. The broad shadows give his drawing much more depth than it had in its first, linear stage.



4-9 Wu Chen, *Bamboo in the Wind*, early fourteenth century. Hanging scroll, ink on paper. Museum of Fine Arts, Boston (Chinese and Japanese Special Fund) 15.907. Photograph ©2008 Museum of Fine Arts, Boston.



4-10 Rembrandt van Rijn, *Woman at a Window,* 1655. Pen and ink and bistre, $11\frac{1}{2}$ " \times 6 $\frac{3}{8}$ ". Louvre (Department of Graphic Arts), Paris.

CONTEMPORARY APPROACHES TO DRAWING

Rembrandt's dramatic gestures give the viewer a vicarious sense of the act of drawing, so we can almost share the experience of dashing off the quick wash seen below the window. One of the great pleasures of examining a drawing is a sense of intimacy with the artist. We can see the artist's imagination at work. Many drawings provide us with a look at the creative process, enabling us to see the early ideas, the changes, and the final decisions. This is particularly true of the work of the South African artist William Kentridge. Erasures are the essential part

of his drawing process (4-11). The signs of erasing are intentionally left in, the pale memories of earlier lines and shapes giving texture and weight to the drawing. The image would be cleaner but emptier without them.

Erasing is also the active force in Kentridge's animations. This charcoal drawing is just one of hundreds for his animated film *Tide Table* (see Chapter 7). Each forms a frame that he photographs, erases and redraws, and then photographs again. Viewers witness the artist's ideas as they evolve in time, as each image dissolves into another.

Paper cutouts were called "drawing with scissors" by the French modern artist Henri Matisse (see Chapter 18). This popular folk art technique of the eighteenth and nineteenth centuries, also known as *silhouettes*, was revived in the modern era and is used by the contemporary artist Kara Walker to reexamine the past, particularly the conflict between images of slavery and romantic love in the South (4-12). She begins by laying big sheets of black paper on the floor and draws directly on them with white chalk. She then cuts her shapes out and arranges them on the wall. Walker doesn't use any photographs as sources, but creates her characters from her imagination.

In her work Gone, An Historical Romance of Civil War as it Occurred Between the Dusky Thighs of Young Negress and Her Heart, she revisits the popular novel and movie Gone with the Wind. The novel's depiction of life in the South during the Civil War has shaped the image of that war for Americans. As a black woman who has lived in Atlanta, Walker was surprised that when she read this book, she felt her-

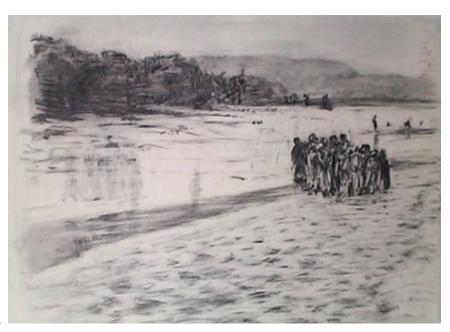
self "wanting to be the heroine and wanting to kill the heroine at the same time."

Contrast is what makes silhouettes stand out against their backgrounds. Contrast is also the method Walker uses to convey her ideas, and conflict is the result. While her black cutouts are skillfully cut and delicate, their message is raw and painful. Walker puts side-by-side both romanticized Southern aristocratic lovers and racist depictions of black women. Because her characters are portrayed in silhouette, they are not individuals but anonymous, mythic types.

Walker uses a folk art technique, traditionally used for portraits and small landscapes, but makes it wall-sized. This connects her pictures with the huge academic historical paintings that were popular during the time of the Civil War (see Chapter 16). Viewers, however, are not offered an impressive, idealized scene. Walker's elegant costume drama forces us to face the abuse and humiliation of slaves that supported the grand lifestyles of the men and women heroes in the epic novel *Gone with the Wind*.

The drawings of the artist Cai Guo-Qiang are also quite large and combine conflicting elements—fine papers with violent explosions. Cai was born in China, where gunpowder was invented, and was trained in stage design at the Shanghai Drama Institute. As a young man, he felt artists in China were too restrained by both ancient traditions and government controls. He wanted an approach that was spontaneous and imaginative.

His drawing materials—Japanese paper, loose gunpowder, and gunpowder fuses—all have long traditions but have never before been mixed. To start, he



4-11 William Kentridge, Drawing from *Tide Table*, 2003. Charcoal on paper, 31½" × 47¼". Marian Goodman Gallery, New York.

first lays long sheets of paper or panels on the ground. Then with a dish of gunpowder in hand, he walks barefoot across the paper, tossing down clumps of gunpowder. He then artistically arranges long fuses across the gunpowder. Sheets of cardboard are positioned by him and his assistants on top of the powder and fuses, with large rocks placed thoughtfully to hold the cardboard down in order for the gunpowder to be better singed into the paper and not be blown away in the explosion. Once the fuses are lit, the room is, for a moment, filled with light, smoke, and the rat-a-tat sound of loud firecracker explosions.

After the smoke clears and the rocks and the cardboard are removed, Cai may decide to add more gunpowder and fuses to complete his work. Despite the violence of their birth, the finished drawings (4-13) are surprisingly subtle. The paper can be darkly charred in some places, with other parts barely touched by soft smudges. But every mark is filled with energy.

Cai's drawings have led him to grander spectacles. He has drawn pictures in the sky with explosions at festivals around the world, including New York (where he now lives), Edinburgh, and Venice. At an air show in San Diego, he directed the movements of airplanes, so their white vapors would make a Chinese landscape painting of mountains and a waterfall in the sky. For a project in Warsaw during 2005, he wove a giant flag out of red gunpowder fuses and cloth. He mounted it on an old Soviet-era truck and ignited it. The red flag, according to the artist, symbolized the fervor and dangers of extreme nationalism. By exploding it, he felt he was consigning that period of totalitarian rule into history.

In light of the events of September 11, 2001, in the city he now calls home, Cai has orchestrated large-scale explosion projects. After the attacks, he believes the city has more need to see hope in projects like his explosions in order to move on from the tragedy."... Because the artist, like an alchemist, has the ability to transform certain energies, using poison against poison, using dirt and getting gold."

Although Cai is able to draw realistically, sometimes even with gunpowder, he prefers not to have complete control over his materials. Cai's approach to drawing exposes the lack of imagination in the question, "Can he draw?" It ignores the possibility of not only nonrepresentational drawings but whole new forms of marking paper. Realistic rendering is only one type of drawing; even the masters of past centuries sketched abstract diagrams of planned works. Artists have always drawn for a variety of reasons and produced a wide diversity of work. As we



4-12 Kara Walker, Gone: An Historical Romance of Civil War as it Occurred Between the Dusky Thighs of Young Negress and Her Heart, 1994. Detail of 21 paper silhouettes approximately $13' \times 50'$ installed. Walker Art Center. Image courtesy of Sikkema Jenkins & Co.



4-13 Cai Guo-Qiang, *Drawing for Transient Rainbow*, 2003. Gunpowder on paper, 198 3/4" × 157 1/2". Fractional and promised gift of Clarissa Alcock Bronfman. The Museum of Modern Art, New York, NY. Courtesy of Cai Studio.

will see in the following chapters, the limitations of every medium are far less important than the power of the imagination of the artist.

5 Painting

hen most people think of art, they think of painting. This seems to be true of both the layperson and the connoisseur. Our museums devote more space to painting than any other art form. During the Renaissance, there was a great deal of discussion about whether painting was the highest of the arts. Leonardo da Vinci thought it was, placing it above sculpture and poetry. He wrote:

if the painter wishes to see enchanting beauties, he has the power to produce them. If he wishes to see monstrosities, . . . he has the power and authority to create them . . . if in the hot season he wants cool and shady places, or in the cold season warm places, he can make them. . . . Indeed whatever exists in the universe, whether in essence, in act, or in the imagination, the painter has first in his mind and then in his hands.

There was even a questionnaire on this issue distributed to many of the important artists of the time. A painter, Pontormo, responded that the complexities of his medium were much more challenging than the others. He wrote:

there are the various modes of working—fresco, oil, tempera ... all of which require great practice in handling so many different pigments, to know their various results when mixed various ways, to render lights, darks, shadows, high-lights, reflections, and many other effects beyond number.

The painting media are certainly more complicated than the drawing media discussed in the last chapter. Many formulas for paint have been used over the centuries, and some artists have almost become chemists in their desire to create the perfect paint. However, all paints share a general formula that is not difficult to remember: They are a combination of powdery pigments combined with a liquid *binder*, also called a *medium*. This glue-like substance holds the paint together and attaches it to the surface (called the **ground**). What differentiates the painting media from each other, and gives each one its special qualities, is the type of medium used.

ENCAUSTIC

Encaustic is a painting medium that is at least seven thousand years old. It is created by mixing colored pigments with hot beeswax and then painting the mixture on a surface before it cools. After it hardens, the wax surface is remarkably permanent, and the painted colors can retain their brilliance for thousands of years.

We are not sure when this method was first used, but Homer describes in *The Iliad* how the ancient Greeks waterproofed and decorated the hulls of their ships with hot, colored wax. The realistic portraits on Egyptian mummy cases from the first century BCE are some of the earliest surviving examples of encaustic painting. The colors painted on ancient Greek and Roman marble statuary were usually in encaustic (probably because it also waterproofed



5-1 Jasper Johns, *The Seasons: Summer*, 1985. Encaustic on canvas, 75" × 50". Gift of Philip Johnson, Museum of Modern Art, NY. Art © Jasper Johns/Licensed by VAGA, New York, NY

them). In the past fifty years, this ancient painting medium has experienced a revival among contemporary artists.

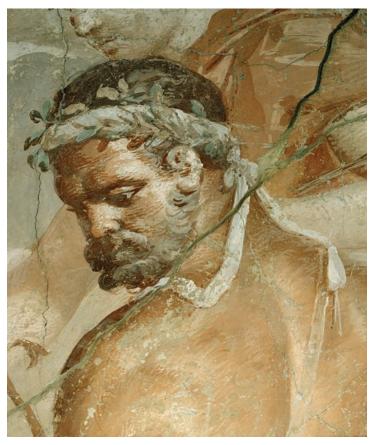
Jasper Johns has been one of the leaders of the encaustic renaissance. His series of encaustics, *Seasons*, from the 1980s, were done when the artist was in his late fifties and contemplating moving. By increasing the amount of wax in encaustic paint, it becomes more transparent. Johns uses this property when painting his silhouette, a projected shadow that appears in all four of these autobiographical paintings.

Encaustic also allows an artist to build up many layers of textured paint. The complexity of Johns' pictures comes from the many layers and the amount of subject matter he includes. Surrounding his silhouette are many objects that have personal meaning for the artist. In *The Seasons: Summer* (5-1), bits of his earlier works, like his early American flag series (see Chapter 20), can be seen, all held up by a rope, strung across a ladder. There are references to the discoveries of his young adult years, like the art of da Vinci, as well as a love of pottery. At the bottom are outlines of building blocks, as if to say these were the building blocks of my career. In *Fall*, the ladder snaps, the rope comes loose, and different pictures tumble down. Greens have turned to brown and the arm swings lower like a clock. By *Winter*, the hand is straight down and the scene is gray and covered with snow.

FRESCO

Traditional **fresco** is one of the most permanent of the painting media. It is a wall painting technique that has been in use since ancient times. Beautifully preserved examples can still be seen on the walls of homes at the excavations at Pompeii and Herculaneum, Roman towns buried in volcanic ash around 79 **(5-2)**. Michelangelo's paintings on the Sistine Chapel ceiling (see Chapter 14) are among the many masterpieces done in fresco. In fresco, the painter combines colored pigment with water and brushes it directly onto fresh, wet plaster (*fresco* means "fresh" in Italian). As the plaster dries, the pigment becomes bound into it and literally becomes part of the wall itself. This chemical process is what makes fresco painting so permanent.

Because the painting has to be done while the plaster is wet, the fresco painter must work rapidly. Much planning is usually necessary, and often an artist will make many sketches on paper. Large wall



5-2 Herakles and Telephos, detail, Herculaneum, c. AD 70, after an original from the second century BC, wall painting, approximately 7' 2" × 6' 2". Museum Nazionale, Naples, Italy.

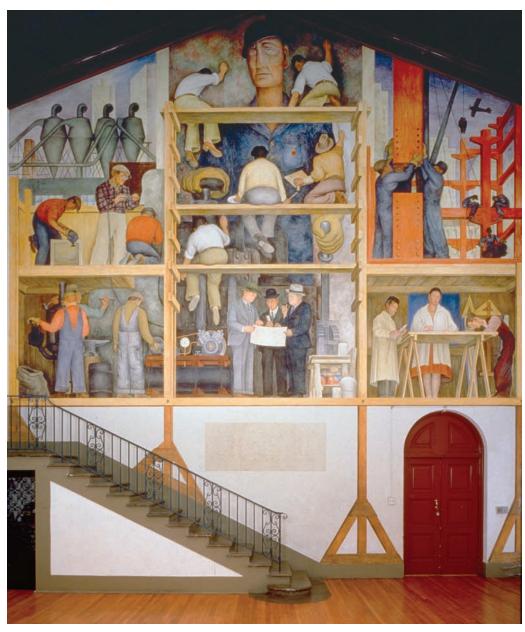
paintings are done in sections; a life-size figure alone might take two days to complete. While some minor changes are possible, major revisions require lifting out whole sections of plaster and beginning again. Heavy scaffolding must usually be set up next to the wall, which makes it difficult for artists to see their work from a distance. Michelangelo was not alone among the artists who, in deep concentration, have taken one too many steps backward on the scaffolding while viewing their work. Some have even been killed.

The demands of this medium, and the availability of more flexible media like oil painting, made fresco painting rare after the Renaissance. However, in the twentieth century, in an effort to create murals that spoke to and were accessible to ordinary people, Mexican artists like Diego Rivera revived the ancient art. His The Making of a Fresco, Showing the Building of a City (5-3) took almost three months to paint. Because it was intended for an art school, the San Francisco Art Institute, Rivera designed a painting of painting, one that illustrated the fresco process. The artist showed himself sitting in the center, a brush and plate (his palette) in hand. Four assistants are with him on the painted scaffolding. One looks down to Rivera for direction, while another is applying fresh plaster. Like the fresco that these "painters" are painting, many of Rivera's murals depict workers in our industrial society. Here, Rivera deliberately eliminated any clear borders between the painters and the workers they portray, expressing his belief in the solidarity of mural painters with all working people.

TEMPERA PANEL

In tempera, a media developed in the Early Renaissance, pigments are usually mixed with egg yolks (which is why it is sometimes called "egg tempera"). Yolks are a powerfully adhesive medium, as anyone who has tried to remove eggs left on a plate overnight can attest. In tempera, each color must be premixed in light-, medium-, and dark-toned versions before beginning to work. Shading is done by placing small strokes of these colors side by side. Like crosshatching in drawing, the accumulation of lines creates a modeling effect. Wood, rather than canvas, is the customary support for tempera paintings because it is rigid and tempera has a tendency to crack if flexed. In past centuries, wood panels were prepared for the paint by adding several layers of gesso—a thick paste of gypsum and animal glue.

5-3 Diego Rivera, *The Making of a Fresco, Showing the Building of a City*, April-June 1931. Fresco, 18' 7" × 32' 6". San Francisco Art Institute.



Gesso produces a bright white surface that paint adheres to well.

The most famous tempera painter today is Andrew Wyeth, an American realist. His *Christina's World* (5-4) was painted in the traditional manner; Wyeth prepared a panel with gesso before beginning. By looking closely at the grass in the foreground, one can see many fine strokes of paint applied one over another. Tempera dries quickly, so it is sympathetic to building up painted areas in this way. Because its method of application is similar to that of drawing, many artists who have a strong background in representational drawing skills use tempera.

OIL PAINTING

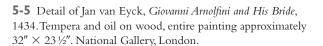
In the past, Renaissance artist Jan van Eyck (see Chapter 14) was given credit for inventing oil paint in the fifteenth century, but this is not really true. As early as the eleventh century there are records of oil-based paint. A medieval monk mentioned it in his writings but did not recommend it. He felt one of oil painting's properties—its slow drying time—made it unsuitable for most paintings. In the Renaissance, however, artists like van Eyck and da Vinci took advantage of that special property to create paintings of unsurpassed detail and depth.



5-4 Andrew Wyeth, *Christina's World*, 1948. Tempera on gessoed panel, $32\frac{1}{4}$ " × $47\frac{3}{4}$ ". The Museum of Modern Art, New York (purchase). Copyright ©Andrew Wyeth.

They can be given credit for showing their fellow artists the wonderful capabilities of oil painting, making it the dominant medium in Western painting since that time.

As might be assumed, oil paint is a combination of ground pigments and oil. The oil is usually linseed oil, but other kinds have been used by artists. Oil paint can be used on many different grounds: paper, wood, and one that particularly excited Renaissance artists—canvas. This was a new portable support, one that, because of its light weight, could be used for much larger paintings than those on wood panels. The flexibility of the oil medium when dry makes it even possible to roll a large canvas up for transport without cracking the paint.





Even more important to artists, oil paint allows a less methodical and freer approach to painting than fresco and tempera. Oils can be applied in layers, and an oil painting can be reworked over and over again. Because oil paint can cover up earlier versions, van Eyck was able to change the position of his subjects even days after they were initially painted.

Oil paint can also be diluted with oil medium or solvents like turpentine and made into transparent **glazes.** In the detail shown of his *Giovanni Arnolfini and His Bride* (5-5; see Chapter 14 for the complete picture), van Eyck first applied opaque strokes called **underpainting** in all but the white and flesh-colored areas, then added transparent strokes on top to build up the softly blended illusion of three-dimensional forms. The luminosity of the bride's face is from the white ground that can still be seen below thin strokes of pink and brown. The exquisite details of the fur on her collar, the chain on her neck, and the edging of her head cloth are all extremely realistic and would have been impossible to create

in earlier mediums. To heighten the painting's realism, he eliminated all marks of his brush, leaving no sign of the human gesture or act of painting on the smooth surface.

Not all artists who work in oil try to conceal their hand. One of the most daring and inventive masters of oil paint was J. M. W. Turner. His pictures, like the Snow Storm (5-6), are an orchestration of a variety of techniques. Thin blue washes of underpainting that established the basic composition can still be seen to the right, but in most areas, thick, stiff paint, called impasto, has been added. Impasto paint reveals the action of brushstrokes; here it adds to the ferocity of the storm that has trapped a boat. Turner used the thickest paint for the glow of the strong central light. In the midst of it, perhaps to dramatize the ship's fragility, he used thin black paint, applied with a fine brush, to delineate the threatened mast. To create the dark, swirling shapes of the storm clouds, below the impasto Turner used a technique called wet into wet. As the medieval monk pointed out, oil paint dries



5-6 J. M. W. Turner, *Snow Storm: Steam-Boat off a Harbour's Mouth*, 1842. Oil on canvas, 36" × 48". Tate Gallery, London.

slowly. One advantage of this is that painters can mix colors directly into the wet paint on the canvas. The final effect of all these techniques is a wild, vivid surface in keeping with an exciting subject.

WATERCOLOR AND GOUACHE

Transparency is the essence of **watercolor**, a quickdrying combination of pigment and gum arabic. When diluted with water, it can be brushed smoothly onto a ground (usually paper). As with ink washes, changes are difficult in watercolor, so success depends on a direct, spontaneous application. Because watercolor paintings dry so quickly, many artists like making sketches in watercolors as studies for works in other media. Paul Cézanne, however, considered his watercolors independent finished works. To keep his colors fresh in his *Three Skulls* (5-7), he applied them

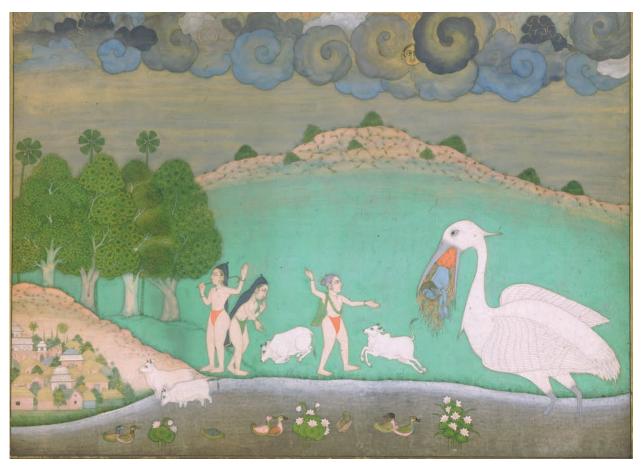
in thin washes. Successive transparent layers of color describe the rounded forms.

One of the most valued characteristics of water-colors is their luminosity. It is the white of the paper that is the secret behind this quality. The more of the paper that remains uncovered, the more brilliant the effect. Notice how the three skulls that form the main focus are hardly touched by paint. Cézanne was a master of including just enough touches of color for a shape to emerge from the whiteness of the page.

By adding chalk to pigment and gum arabic, watercolor becomes an opaque paint called **gouache**. Unlike watercolor, which cracks when applied heavily and easily gets muddy, gouache can be applied more thickly, covers well, and permits changes without losing the freshness of its colors. It can also be returned to transparency by diluting it with a high proportion of water. In India, opaque watercolor was used on paper for paintings to be bound in books of Hindu stories. These meticulous paintings were done with handmade brushes of the finest hair from kittens or baby



5-7 Paul Cézanne, *Three Skulls*, 1902–1906. Watercolor with graphite and touches of gouache on ivory wove paper, 19" × 243/4". The Art Institute of Chicago (Mr. and Mrs. Lewis Larned Coburn Memorial Collection, 1954.183). Photography © The Art Institute of Chicago.



5-8 Bakasura Disgorges Krishna, page from a dispersed Bhagavata Purana manuscript, India, c. 1690. Opaque watercolor and gold on paper, $8^{3}4'' \times 12''$ excluding border. Kronos Collection, New York.

squirrels. Artists also fabricated their own paint. The painter would work cross-legged, with a board supporting the picture in his lap. One small painting, like *Bakasura Disgorges Krishna* (5-8), might take months to complete. The picture shows the god Krishna forcing a demon in the shape of a heron to spit him out by becoming very hot. Notice the bright flames surrounding Krishna. In this painting, gold paint was used, the pigment ground from thin metal foil. It can be seen in the sky and the top of the hill. In addition, gold highlights in the fire and the rays coming from the head of the sun were added as the last stage.

ACRYLIC

In the twentieth century, an extremely flexible, new kind of paint called **acrylic** was invented. Acrylic is a water-based paint originally made for industrial use in the 1950s. The medium is a plastic polymer, made from resins, that dries quickly and can be applied to just about any surface, whether it has been spe-

cially prepared or not. Polymers are very adhesive and make an excellent glue. Because acrylic paint dries quickly, changes can be made almost instantaneously; or agents can be added to slow drying and permit wet into wet techniques.

Helen Frankenthaler was one of the first artists to explore the possibilities of this new industrial paint. Because it can be applied to unprepared, raw canvas, in *The Bay* (5-9), Frankenthaler let washes of acrylic paint soak into the fabric. With the canvas on the floor, she would pour paint onto it and then manipulate it with sponges or by tilting the canvas. This became known as the *soak and stain* method, in which sensuous, rich veils of color are created.

Applied to a surface that has been prepared with a ground, acrylic paint provides an absolute flat, pure surface. Used more thickly, impastos are possible. Acrylic is available in brilliant, as well as metallic and fluorescent colors. In an extremely diluted state, it can be applied with an **airbrush**—a spraying device that uses an air compressor to propel a paint mist through a nozzle. There are no size limits to acrylic



5-9 Helen Frankenthaler, *The Bay,* 1963. Acrylic on canvas, 6' 8½" × 6' 9½". © The Detroit Institute of Art (gift of Dr. and Mrs. Hilbert H. DeLawter). Copyright @Helen Frankenthaler

painting—it has been used for miniature painting and outdoor murals. In fact, because they are made of plastic polymers, acrylic paintings weather well and can even be washed with soap and water.

CONTEMPORARY APPROACHES TO PAINTING MIXED MEDIA

Cutting and pasting paper, parchment, and other materials had been done for more than a thousand years before the Cubists legitimized **collage** as fine art at the beginning of the twentieth century (see Chapter 18). Previously, collage had been known as a folk art. For example, in the eighteenth century, nuns in European convents used butterfly wings to make religious pictures. With the advent of photographic reproductions in the late 1800s, almost any imaginable image became available for collage. Mixing materials, using them in unusual ways, and not respecting the borders between two- and three-dimensional media are all characteristics of a modern art form known as **mixed media**. Mixed media can include traditional and innovative materials combined in unexpected ways, as well as manufactured and natural "found objects."

GLOBAL VIEW Tibetan Sand Painting

The well-documented permanence of fresco, oils, and acrylic is one of the factors that has attracted Western artists to those mediums. After working weeks, months, or even years on a picture, most artists would find it painful to see it disappear. Some artists have even committed suicide after fire destroyed their studios

and their artworks. But Tibetan Buddhist monks deliberately work in a medium

that can disappear with a sneeze—colored sand (5-10).

Delicate, detailed sand mandalas (an intricate circular, geometric design where deities symbolically live) are made by three or four monks sitting cross-legged under a brightly colored canopy. They work from the center and progress outward. The sand is colored with the brightest of pigments, following a circular pattern used continuously for twenty-five hundred years. Hundreds of deities are invoked by the creation of the mandala. Iron funnels are lightly stroked to create a thin line of sand and a soothing, rhythmic sound. Sand painting thereby appeals to both the eyes and the ears. Contemplation of the creation of a mandala is believed to have a healing influence and help one move toward enlightenment. According to one monk,

The sand mandala is an ancient tradition. Working on it manifests peace. And even a person who simply sees it may feel peace from deep inside.

The Tibetan monks believe the few people who see the mandala during its week of creation will increase its positive influence in the world because they have had a moment of pure peace. After it is finished, the sand painting is poured into a river to bring healing to the creatures who live in its waters.



5-10 A Sand Mandala is constructed of grains of colored sand during an eight-day ritual by monks from the Drepung Loseling Monastery in India.

Collages like Romare Bearden's *Prevalence of Ritual: Baptism* (5-11) are memories of his childhood in North Carolina. He pieced together magazine reproductions with areas of watercolor, and sometimes fabric, making pictures related to both the fractured space of Cubism and the tradition of African-American quilting (see Harriet Powers in Chapter 11). By making each person in his collage an amalgam of several, he is able to imply a long history of baptisms in the South. The fragments in the scene create a lively syncopation throughout the picture, evoking the free improvisations of jazz.

SHAPED CANVASES

Since the 1970s, Elizabeth Murray, an American artist, has been making paintings with large organic shapes that almost seem to push out at the viewer. In *Kitchen Painting* (5-12), she decided to see what would happen if the abstracted shapes really did project out of the canvas into three-dimensional space. The picture is actually two separate canvases with an overall height of seven feet. Neither is in a conventional rectangle; instead, both are shaped and beveled to fit the image. A thin, black figure sits on a green chair attempting to grasp an enormous spoon that pushes out two feet into the room. Whether this is now a sculpture or remains a painting is not a question that preoccupies Murray. Speaking for many contemporary artists, she says her goal is to "respond to being alive," not to categorize.

UNIQUE MATERIALS

The issue of permanence has been an important one for painters for centuries and continues to be today. Exceptions like Tibetan sand painting (see box) are rare because patrons have always demanded that the artworks they purchase or commission will last and not fade or deteriorate for a long time.

The Brazilian artist Vik Muniz has expanded the painting media by using materials that are far from permanent. In fact, some of the materials he uses would be impossible to store or even pick up without destroying the image. Action Photo 1 (5-13) is from Muniz's series "Pictures of Chocolate." It is a copy of a well-known photograph of the Action Painter Jackson Pollock (see Chapter 19) at work on one of his drip paintings. Muniz painted his copy in chocolate syrup—an odd but not totally inappropriate choice. Like Pollock as seen in the original photograph, Muniz dripped his "paint" across his canvas (in this case paper). While Pollock would use long sticks and brushes, Muniz's gooey lines of chocolate were pushed into place using tweezers and toothbrushes.

Muniz has copied many other famous images in unusual materials. He has painted the *Mona Lisa* in peanut butter and jelly and reproduced a Caravaggio painting of Medusa in pasta and marinara sauce. While chocolate is a favorite material, Muniz has also used fake blood, ketchup, caviar, glitter, Silly Putty, nails, wire, and small brightly colored children's



5-11 Romare Bearden, *Prevalence of Ritual: Baptism*, 1964. Photomechanical reproductions, synthetic polymer, and pencil on paperboard, 9 1/8" × 12". Hirshhorn Museum and Sculpture Garden, Smithsonian Institution (gift of Joseph H. Hirshhorn, 1966). Photo: Lee Stalsworth. Art @ Romare Bearden Foundation/Licensed by VAGA, New York, NY

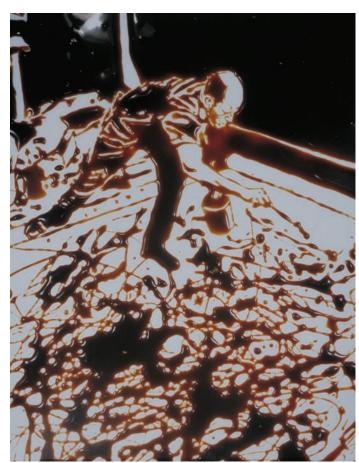
soldiers. By remaking the familiar in an unfamiliar way, he hopes that viewers will look more carefully at these famous pictures. Muniz says that "What am I looking at? [is the] one question I am always trying to evoke in my work." The unusual media also reminds viewers that "a picture is always made out of something."

Because most collectors would not be interested in hanging a painting that would eventually drip down the wall and collect on the floor in a puddle, Muniz takes photographs of each of his works. These photographs are sharply focused and clearly printed in color. The brown syrup's glossy highlights shine and the edges are crisp. Most viewers do not realize until they see the picture's label on the wall that they are not looking at real chocolate. But in fact, the chocolate is long gone—sometimes even eaten by Muniz.

In the case of Vik Muniz's work, photography provides a permanent record of his ephemeral



5-12 Elizabeth Murray, *Kitchen Painting*, 1985. Oil on two canvases, $58'' \times 81'' \times 14''$. Private Collection, New York. Courtesy Paula Cooper Gallery, New York



5-13 Vik Muniz, *Action Photo 1* (From "Pictures of Chocolate"), 1997. Cibachrome print, 61" × 49", Victoria & Albert Museum, London. Art @ Vik Muniz/Licensed by VAGA, New York, NY

paintings. This is somewhat ironic because when photography was first invented, many painters saw it as a threat to their medium. Today, a new threat has arisen—digital painting (see Chapter 8), a medium that can recreate just about all of the traditional painting media on the computer and enhances them with a wide range of digital tools. But the death of painting in the twenty-first century seems as unlikely as it was in the nineteenth century. Painting seems to be a natural impulse, and the pleasure that one gets from creating an image in paint (even if the paint is chocolate) is undeniable. It is still felt by little children as they finger paint and by retirees recreating a sunset in oils on an easel. While new media will continue being created, it is reasonable to remain confident that painting, a medium that first appeared in caves thirty thousand years ago, will continue to be a favorite of artists for years to come.

Printmaking

uring the Renaissance, so many important changes took place in the Western world that it seems impossible to select the most significant development. However, the invention of the printing press in the 1450s is certainly among the greatest innovations of this period. To use just one example, Martin Luther's Protestant **Reformation** would probably never have occurred if thousands of copies of his ninety-five criticisms of the church ("95 Theses"), supplemented with printed cartoons for the illiterate, had not been circulated all over Europe. No wonder Luther said, "Print is the best of God's inventions."

In art, printing's effect was perhaps not quite as dramatic, but its contribution has been very significant. The book you hold in your hands is a product of the print revolution. The modern concept of art appreciation would not be possible without printing presses. Because of art reproductions, art—once the exclusive domain of the very wealthy and powerful—is today available to virtually everyone.

The term *print*, however, has a special meaning to the fine artist. It does not mean photographic reproductions like those in this book, but reproductions or *multiples* made directly from a block, plate, stone, or screen that an artist created. The number of prints is limited by an artist and is called the **edition**. Once the last print of an edition is "pulled," the block, plate, or other source is destroyed. Usually an artist will sign each print and also number it. For example, "23/100" means the print was the twenty-third out of an edition of one hundred. Even though an edition can number in the hundreds, each individual print is still considered an original work of art. Even before printmaking, there were other precedents for this understanding of what is an "original"—for example, limited sets of bronze

casts made from a clay sculpture.

One of the most important effects of printmaking has been making fine art originals available to more people. Because they are multiples, prints are generally less expensive than other art forms. Many artists chose to be printmakers because printmaking seemed less elitist, more democratic than the other media.

RELIEF PRINTMAKING

Woodcut

In the past five hundred years, many forms of print-making have evolved. The first in the West was the **woodcut** print, adapated from an Asian technique for printing cloth. When illuminated (handpainted) manuscripts were replaced by printed books, a way to print illustrations was also needed. Woodcut blocks were found to be the most appropriate because they fit easily into the printing press along with the type. Woodcuts are among the simplest of the print media (6-1). They are made by carving directly into a smooth piece of wood and removing any areas of the surface that are not part of the future

image. In essence, the negative spaces of a design are cut away, leaving the positive areas raised up, ready to be printed. Usually a drawing is made directly on the wood, and then the background is cut out around it. The carved block is inked with a roller; the uncarved wood remaining on the surface will receive the ink and make an impression on the paper. Because the print's marks are made from inking what is left in "relief" on the block, woodcuts fall into the category of **relief printmaking.** Linoleum cuts and rubber stamps also fall into this category.

For example, in Albrecht Dürer's *The Four Horsemen* (6-2), all of the white areas had to be carved out of the block so the thin black lines in the print could appear. To make the actual print, a piece of paper is placed on top of the inked woodblock and either



6-2 Albrecht Dürer, *The Four Horsemen*, from the Apocalypse series, c. 1498. Woodcut, 15 ½" × 11". British Museum, London, Great Britain.

rubbed on the back by hand or passed through a printing press to transfer the image to the paper.

The first woodcut prints in Europe were decorated with crude, simple images. Purchased by ordinary people, most were either playing cards or devotional images, like saints or charms for warding off evil. Albrecht Dürer was the first Renaissance artist to show that prints could be the equal of painting or any of the other fine arts. At the time he created *The* Four Horsemen, Dürer had just returned from Italy, where he had seen the works of the great Renaissance masters for the first time. He wanted his woodcuts to have the vital force and imaginative compositions that he admired in Italian painting. The fine details in this print, the result of elaborate carving, had never been seen by Europeans in a woodcut. By recreating drawing's parallel hatching on his woodblock, he was able to model his forms and provide a sense of movement and excitement. The subject of the print is taken from Chapter 6 of the Book of Revelation and known as the four horsemen of the Apocalypse (or end of the world). The first horseman on the right holds a bow and symbolizes conquest; the second holds a sword, symbolizing war; the third a pair of scales, symbolizing famine; and the horseman at the front left of the image is Death riding a pale horse. In the lower lefthand corner is Hades, the mouth of hell:

And behold, a pale horse, and its rider's name was death, and Hades followed him; and they were given power over a fourth of the earth, to kill with sword and with famine and with pestilence and by wild beasts of the earth.

Dürer's print brings this fantastic scene to life, with the skeletal figure of death creating a vivid, unforgettable image of horror.

Woodcuts with fine details and elaborate design were familiar in Asia centuries before Dürer's landmark work. Paper, a necessary material for traditional printmaking, was invented in China approximately one thousand years before it first appeared in the West. So it is not surprising that the first woodblock prints also appeared earlier in the orient, around AD 800. Buddhist scrolls printed in China found their way to Japan, which eventually produced some of the greatest prints ever made. Even Dürer's superb woodcut seems rather crude next to Kuniyoshi Utagawa's *Various Stages of Making a Color Print* (6-3).

As seen in this print, the Japanese woodcut printing process was very different than the one Dürer followed. Dürer designed and carved his blocks himself. In Japan, a color print was the work of several artisans, each with a specialized role. Utagawa was the designer of the print, making the drawing and planning the color scheme. Cutters would then carve the block, while printers would ink and print







6-3 Kuniyoshi Utagawa, *Various Stages of Making a Color Print*, 1857. Color woodcut, 9³/₄" × 14 ½". Victoria & Albert Museum, London.

it. They worked as a team, with no member considered more important than another. The Japanese did not share the Western idea that the artist's unique concept is the most valuable part of an artwork. The Japanese characters at the sides of the print are the marks of the various workers, much like the credits at the end of a film.

In a color print like this one, each separate color is the product of a different carved wooden block. As in all color prints, each color must line up correctly with the previously inked color images as it is added to the print (known as proper **registration**), or the print will be ruined—blurred or mismatched. This registration requires skill and planning by both artist and printer. We will see later in this chapter and in Chapter 17 that Japanese print design was extremely influential in the development of both modern printmaking and Modern Art.

Wood Engraving

Another relief process is **wood engraving**, first used in the 1800s. It is similar to woodcut but uses the endgrain on blocks of very hard wood, and because the endgrain is so hard, tools designed to cut metal are needed. The wood's density permits very fine, precise lines to be created, and, compared to woodcuts, many more prints can be made before the block begins to deteriorate. These two properties made wood engraving particularly useful for book illustration.

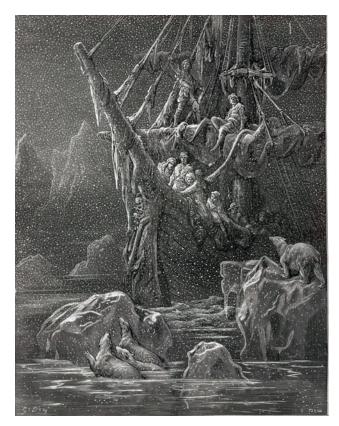
Gustave Doré was the preeminent French illustrator of the mid-1800s. It was his aim to illustrate all of the great books in Western literature. Figure **6-4** shows one page from his illustrated edition of the English Romantic poet Samuel Coleridge's famous poem *The Rime of the Ancient Mariner*. Doré would work on several blocks at once, first drawing directly on each block and then moving around his studio making careful cuts on one, then another, until they were all finished. The section of the poem illustrated by this engraving tells of a sailing ship sent off-course by a storm and reads:

And now there came both mist and snow, And it grew wondrous cold:

And ice, mast-high, came floating by, As green

as emerald.

Notice how Doré was able to engrave delicate, almost perfect, parallel lines throughout his print. By varying their width, three-dimensional forms emerge, like the icebergs in the distance. He contrasts the precision of his lines with the natural effect of falling



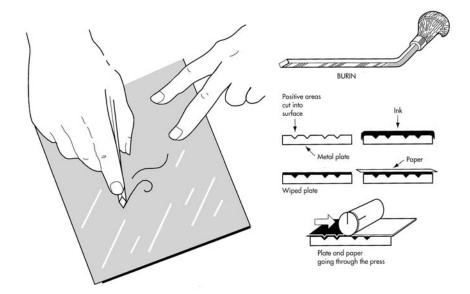
6-4 Gustave Doré, illustration from Samuel Taylor Coleridge's *The Rime of the Ancient Mariner*, 1878. Woodcut, 9 ¼" × 12". Published by Harper & Brothers Publishers, New York, 1878.

snow made freely with short stabs into the wood. Remember that the white lines, shapes, and spots represent cuts in the wood's surface; the black areas represent the surface of the wood that was left uncut.

INTAGLIO PRINTMAKING

Intaglio printmaking is the opposite of relief printing; here what is removed ends up being printed (6-5). Lines are cut into the surface of metal plates using either sharp tools or acids. The cut lines act as little channels that retain the ink after the plate has been inked by a roller and its surface wiped off. Then a piece of moistened paper is placed over the plate. Finally, the paper and plate are run through a press, the heavy pressure of which forces the damp paper into the ink-filled grooves and thereby transfers the image. Like the letters in an engraved invitation, the lines of an intaglio print are raised, because each line on the paper was formed by being pushed into a depression in a metal plate.

6-5 Intaglio engraving process.



Metal Engraving

During the Middle Ages, armorers and metalsmiths decorated metal by cutting into its surface, as had been done on metal weapons and objects for thousands of years. They also knew that prints could be



made on cloth in the same fashion. **Engraving**, the oldest form of intaglio printmaking, was developed when paper became easily available in Europe during the 1400s. In an intaglio process, cuts made on the plate print directly as lines (unlike the relief process of woodcuts or wood engravings, where the cuts remove the background). Special sharp tools called *burins* are the most common engraving tools, but any instrument sharp enough to make a mark on metal can be used. Even a needle can make a small scratch that will be reproduced.

The German artist Martin Schongauer was one of the first to utilize the capability of metal engravings to reproduce delicate, fine lines. In his *Saint Anthony Tormented by Demons* (6-6), Schongauer created a fantastic group of devils whose tails, wings, and claws are drawn in the minutest detail. The sad-faced saint is lifted off the ground and tortured in many ways—the little fingers of an ugly witch stroke his hair, while a furry devil is about to smash the side of his head with a club. From the beard of Saint Anthony to the spikes on an elephant-nosed devil, the precise hatched lines create convincing textures and solid forms.

William Hogarth, a British painter of the 1800s, began making engravings of his work and selling them cheaply because he wanted to make "art accessible to all." The purpose of his pictures, he said, was "to teach." In *Gin Lane* (6-7), the message was to warn the poor about the evils of gin—a new, cheap liquor. At the time, gin was sold unlicensed and by

6-6 Martin Schongauer, *Saint Anthony Tormented by Demons*, c. 1445–1491. Engraving. Fondazione Magnani Rocca, Corte di Mamiano, Italy.

GIN LANE.



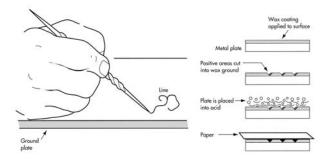
6-7 William Hogarth, Gin Lane, from Beer Street and Gin Lane, c. 1734. Third state engraving, 14" × 11%".

the barrel. A riot at a distillery can be seen to the right. If one looks closely at Hogarth's carefully constructed print, one can see many more "dreadful consequences of drinking." Hogarth was not opposed to all drinking; on his companion engraving *Beer Street*, "all is joyous and thriving," and he calls beer the "happy produce of our isle." Hogarth's efforts were not in vain; the Gin Act regulating the sale of this addictive liquor passed Parliament in the next year.

Etching

Etching is another intaglio process that uses acids rather than metal tools to cut the metal plate (6-8). First, a wax coating, or ground, that resists acid is applied to the plate. The printmaker then draws by cutting through the ground. The plate is then put into a tray of acid that "bites" into the metal in any places where the wax ground was removed, forming lines. After the plate is washed with water, it is inked and printed just like an engraving. Lines can be made lighter (thinner) or darker (thicker) depending on the amount of time the plate is left in acid. Because wax is softer than metal, etching allows the artist to draw lines that are more flowing and spontaneous.

Besides being a great painter and draftsman, Rembrandt van Rijn is known for his fine etchings.



6-8 Intaglio etching process.

One of the most famous of these is his vision of Christ healing the sick, known as the *Hundred Guilder Print* (6-9). As you can see, while woodcuts and engravings depend on lines of varying width, etched prints can create large areas of velvety shadow. As he worked on this print, Rembrandt cut lines of varying widths into the metal plate by placing the plate in acid several times. When he was satisfied with the depth of the lines in each section, it would be covered in a solution that stopped the action of the acid. The areas on the left side of the print, for example, were covered early in the process, leaving the drawing relatively light. In the darkest areas on the right side of the picture, lines were drawn close together in a tight network of crosshatching, then left in the



6-9 Rembrandt van Rijn, *Christ with the Sick around Him, Receiving the Children (Hundred Guilder Print)*, c. 1649, etching, approx. 11" × 1' 3 ¼". British Museum, London, Great Britain.

acid bath until they became an almost solid black field. The brilliant light surrounding Christ—seeming to emanate from his figure—is set against the deep shadow of the background. Not only does this create a strong visual image, but an image that echoes the way that Rembrandt believed Christ's healing message illuminated the world. No wonder Rembrandt was able to command a high price for this print! Like Schongauer's Saint Anthony and Dürer's Four Horsemen, Rembrandt's Christ with the Sick Around Him, Receiving the Children spread the message of Christianity—and fine art—into the homes of many more people.

Aquatint

Although the lines were etched as described above, the tonal areas in Mary Cassatt's *The Letter* (6-10) are the result of a different method than the deeply bitten line used by Rembrandt. **Aquatints** are tonal areas made by applying powdered resin to the plate and then heating it. The heat melts the resin, and each particle becomes a dot that will resist acid. As



with etched lines, the longer an area of aquatint is in the acid bath, the deeper the etch and the darker the tone in the final print. Cassatt, an American who exhibited in Paris with the Impressionists (see Chapter 17), demonstrates a mastery of aquatint and color. The white of the envelope and the letter on the desk are actually the white of the paper the print was printed on. Carefully protecting these areas of the metal plate from the aquatint and the acid allows the objects to emerge from the surrounding colors. Within the small flowers that decorate the wall, we can see subtle variations of tones. Like her fellow Impressionists, Cassatt was influenced by Japanese prints. One clear sign of this is the woman's desk, which deliberately ignores mathematical perspective, in the style of printmakers like Utagawa.

LITHOGRAPHY

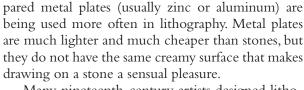
Lithography was invented as a commercial process in Bavaria in 1798 and was first used to reproduce sheets of music cheaply. Within three years, artists began using the new print medium and discovering its unique properties. In lithography, no cutting is involved. Images are drawn or painted directly in grease on a flat stone or plate (6-11). While any substance with enough grease in it will work (such as lipstick), litho crayons (made of wax, soap, and black pigment) and tusche (a greasy liquid that can be applied with a brush or sprayed on) are the most common materials used to make images in lithography. The lithographic stone or plate is then treated with a chemical so only the areas that have grease on them will attract the ink when it is rolled on. A sheet of paper is placed on the stone or plate and run through a printing press.

Traditionally, the preferred surface for lithographs has been limestone from quarries in Bavaria. When prepared properly, it has been described as the premier drawing surface in the world. Every kind of mark made by lithographic grease crayons can be applied and reproduced exactly. Even though each stone can be used many times (by regrinding the printing surface), the intense demand for Bavarian limestone has made the stones increasingly

6-10 Mary Cassatt, *The Letter,* 1891. Color etching, 13 %" × 9". Worcester Art Museum, Massachusetts.

108

rare. Printers around the world consider them their most valuable possessions; dropping and cracking a Bavarian stone is considered a tragedy. Because of the difficulty in obtaining such stones, specially pre-



6-II Lithographic process.

Many nineteenth-century artists designed lithographs, but Henri de Toulouse-Lautrec raised colored lithography to the status of fine art. Miss Loie Fuller (6-12) is a print designed to capture the essence of the American performer who took Paris by storm in the early 1890s. A dancer who did not dance, Fuller used huge billows of fabric and theatrical lights to create an impression of fluid motion. Here Lautrec shows Fuller suspended against a dark background, with only her small head and two tiny feet projecting beyond the exuberant, moth-like wings of her costume. You can see the curved corners of the stone block that the print was drawn on, as well as sinuous outlines of the figure drawn in tusche, and spatters of ink as well as areas of shadow created by a greasy crayon. After this drawing was made, Lautrec experimented with different color combinations as he printed. In this version, the colors of the costume blend into each other, reproducing the effect of the colored electric lights Fuller used during her performances. Lautrec published an edition (or series) of these prints, but each one is slightly different.



6-12 Henri de Toulouse-Lautrec, *Miss Loie Fuller*, 1893, lithograph, printed in color, $14\frac{1}{2}" \times 10\frac{9}{6}"$ (36.8 cm \times 26.8 cm). British Museum, London.

RT ISSUES

What's the Difference between a Print and a Poster?

o you know the difference between a fine art print and a poster? Both are printed duplicates, both are two-dimensional works of art that can be in black-and-white or color, and both can be used to decorate one's home. Both can show works by famous or unknown artists. Usually, both are printed on paper. So what's the difference?

In general, artists' prints are limited editions in which each individual print is considered an original work of art. These types of prints are usually printed or supervised by the artist, carefully numbered, and sold to galleries, museums, or collectors. Posters are reproduced mechanically in huge print runs, and can be sold by the millions in bookstores, museums, on the street, even over the World Wide Web. There was no dramatic difference between prints and posters until the nineteenth century. Most print runs were fairly small and the presses were operated by hand. In the 1800s, however, the industrial revolution also created a revolution in printing. Now images for a general public could be mass-produced in factories.

To understand the difference between prints and posters better, consider the work of Toulouse-Lautrec. We have already seen his print of *Miss Loie Fuller*

(6-12), which appeared in a limited edition for collectors in 1893. Around the same time, Lautrec was also designing posters for events in Paris—posters to be plastered on walls around the city. Instead of being paid by art lovers and collectors, Lautrec was working for businesses—usually theatrical shows—that wanted to advertise their products and services.

In addition to Loie Fuller, turn-of-the-century Paris went wild for a series of female entertainers. One of the most famous was dancer Jane Avril, also a close friend of Toulouse-Lautrec. The artist featured her in several posters, including this one for *Divan Japonais*, a popular cabaret (6-13). Pictured behind Avril is a well-known music critic, and performing on stage (though with her



6-13 Henri de Toulouse-Lautrec, *Divan Japonais*, 1893, lithographic poster, printed in color, $31^{13}/6'' \times 23^{15}/6''$ (80.8 cm \times 60.8 cm). The Museum of Modern Art, New York, Abby Aldrich Rockefeller Fund, 1949.

ART ISSUES

head cut off by the edge of the paper) is another female celebrity, the singer Yvette Guilbert.

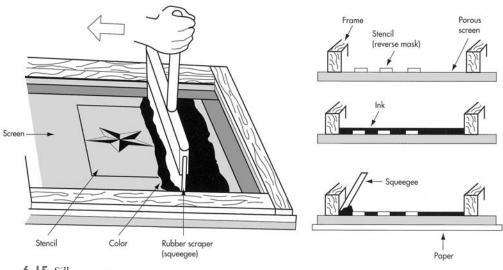
Although it was created as a poster, Lautrec's color lithograph has the same brilliant design as his prints and paintings (see Chapter 17). The treatment of Avril's black dress and hat with their flat, bold shapes is a result of a fascination with Japanese prints that he shared with Mary Cassatt and other Post-Impressionists (see box on Japonisme, Chapter 17). But Japanese prints had been made with small, light blocks of wood. The colors in this lithographic print are a tribute to the dedication and imagination of Lautrec, because each color had to be printed separately using a different stone. Since Lautrec had to use several heavy stones to complete *Divan Japonais* (one black, one yellow, one green, one orange), exact registration was a challenge, yet all of the edges meet crisply. Because he was a great artist, Lautrec's posters have become valued prints over the years. This striking advertisement, once made as one of a storm of competing posters, is now in the collection of the Museum of Modern Art.

Most students purchase posters to decorate their walls, from reproductions of paintings to advertisements for movies, concerts, and rock groups. Such mass-pro-

duced decorative images, like Lautrec's posters, can increase in value over time, some even attaining a kind of cult status. This might be said of posters made for rock concerts in the 1960s. With their curving lines and pulsating electric colors, these images reflect the interchange between the counter-culture of the era and commercial mass culture. "Go with the Flow," a catchphrase of the Sixties, might be a fitting subtitle for this poster designed by Bonnie Maclean in 1967 for a concert at the Fillmore starring The Yardbirds and The Doors (6-14). The type and colored, peacock-tail pattern seem to flow down the surface of the poster, creating a message that is challenging to read, yet intriguing to decipher. Interestingly, this poster like Lautrec's—is in the collection of the Museum of Modern Art, but as part of their design collection. Chapter 11, "Crafts and Design," will further explore the place of design in the visual arts.



6-14 Bonnie Maclean, *The Yardbirds, The Doors*, 1967, offset lithograph, $21\frac{1}{4}'' \times 14''$ (54 cm \times 35.5 cm). Private Collection.



6-15 Silkscreen process.

SILKSCREEN

Silkscreen printing (or *serigraphy*) is one of the newer printmaking media, developed originally for industrial printing of patterns on fabrics. It is an inexpensive method of producing very large editions of prints and is often used for posters and T-shirts. Silkscreen is based on the ancient technique of stenciling. A stencil is attached to a screen of silk that has been tightly stretched over a wooden frame (6-15). After a piece of paper is placed underneath the screen, ink is spread across the screen with a rubber blade or squeegee. The open areas of silk (those not covered with a stencil) let the ink come through and print onto the paper. As in woodcut prints, no press is necessary.

A silkscreen stencil can be created with anything that will block the ink. Heavy paper stencils produce shapes that will print with crisp edges, or glue can be painted directly onto the silk for looser effects. With the use of photosensitive chemicals, it is also possible to create stencils from photographic sources, as in Barbara Kruger's *Untitled (We don't need another hero)* (6-16). Here, Kruger combined two kinds of subjects: photographs and written words. She utilized a photo-stencil to borrow (or appropriate) imagery from another source—an illustration from the 1950s. Her statement "We don't need another hero" is a strong condemnation of the "macho" tendencies in men that the era glorified.



6-16 Barbara Kruger, *Untitled* (We don't need another hero), 1987. Photograph silkscreen and vinyl, 109" × 210".

Collection of Emily Fisher Landau, New York. Mary Boone Galler, NY



6-17 Edgar Degas, *Landscape*, 1890–1893, pastel over monotype on paper, $10\frac{1}{2}'' \times 14''$ (26.7 cm \times 35.6 cm), Museum of Fine Arts, Boston, Denman Waldo Ross Collection, 1909. 09.295. Photograph ©2009 Museum of Fine Arts, Boston.

UNIQUE PRINTS

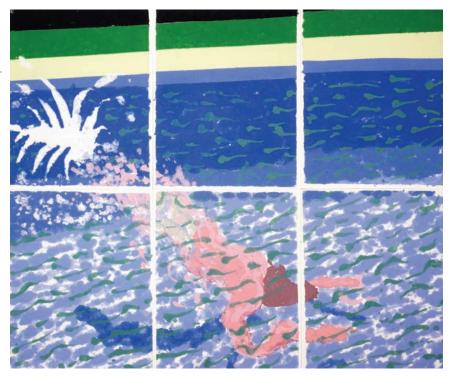
While it seems almost a contradiction in terms, modern artists have used the printing press to create nonmultiple, or unique, one-of-a-kind prints. A **monotype** is made by applying ink or paint directly to a metal plate and then running it with paper through a press. It can also be made without the press by rubbing the back of

the paper. Only one print is made (hence the name). The Impressionist Edgar Degas was a lover of the process because it allows a quick, instinctual approach, compared to the more time-consuming and methodical approach necessary in most printmaking. Like a drawing, monotypes openly reveal the artist's hand; in fact, Degas called monotypes drawings in greasy ink pulled through a press. In his Landscape (6-17), Degas used the dark field method of monotype, where ink or paint is wiped on the whole plate and then removed to build the picture. Here, Degas applied colored oil paint to the metal plate, then wiped off the curving line that suggests a road. After pulling this print, Degas enhanced his image with pastel, making this a mixedmedia, original work of art, part of a series of scenes the artist described as "paysages imaginaries" or imaginary landscapes.

CONTEMPORARY APPROACHES

One of the pleasures of printmaking is working with and handling fine paper. *Papermaking* is a centuries-old craft that interests many contemporary artists. Handmade papers are produced by immersing pieces of cotton or linen in water, literally beating them into a pulp, then squeezing and flattening the pulp into sheets in paper presses. The challenge

6-18 Detail of David Hockney, A Large Diver (Paper Pool 17), 1978. Colored, pressed paper pulp, 72" × 171". Copyright © David Hockney



of recreating the ever-shifting colors in swimming pools has interested David Hockney for many years. Hockney was able to come up with an answer to this challenge by manipulating the papermaking process. In his series called *Paper Pools* (6-18), he added colored pigments directly to paper pulp and placed moist masses of colored pulp directly into the press. Hockney applied the rich colors with spoons, brushes, and even a turkey baster. When the paper was pressed and dried, the image became an integral part of the fabric of the paper. The final picture is actually several sheets of paper. By "painting" with wet pulp that contained pure pigment, Hockney was able to achieve a shimmering liquid quality, characteristic of pools, with unusually brilliant color.

Contemporary printmakers continue to experiment with new techniques and to use prints in exciting ways. For example, in 1996, artist Kiki Smith (known for her work in a wide variety of media) laid a series of prints on top of each other to create a gallery installation. In *Peabody (Animal Drawings)*, (6-19) we see a view of this installation where the prints—all with motifs taken from nature—form a rich carpet on the gallery floor. Many of the images are repeated, as Smith explains:

I have to make about a million proofs of everything. I don't know, it's just a repetition, like a meditation. You come back to something and then you leave it, and then you come back again and you leave it, and each time it changes.

A "proof" is a single, test print made by an artist to see what an image will look like when printed. Here Smith has collected a series of proofs and used them to create an artwork that takes on a three-dimensional quality. The multiple wolves, deer, and other animals emerge in delicate etched white lines, based on the meticulous nature studies of the nine-teenth century, on glowing red and purple backgrounds. For Smith each of these animal images has a symbolic resonance, reminding us of the mysterious connection between humans and nature.

Despite the intermediary of a machine in the creative process, we have seen in this chapter that printmaking is an extraordinarily flexible media. Prints can reveal a human touch or provide a mechanical look. Images can be stark black and white or lavishly colored. Almost from its beginning, printmaking has been accepted as one of the art media with little or no controversy. But, we will see in the next chapter, this is not true of a more modern tool of the artist—the machine known as the camera.



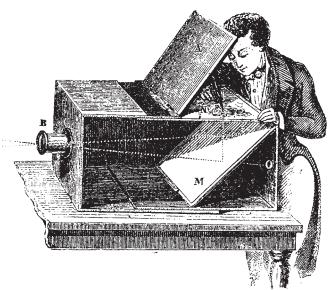
6-19 Kiki Smith, *Peabody (Animal Drawings)*, 1996. Ink on paper, installation view, at the Huntington Gallery, Massachusetts College of Art, Boston, 1996, photo by Gregory Heins.

Photography

Since the mid-nineteenth century, there has been a huge increase in the number of pictures produced and reproduced, largely as a result of the invention of photography. Realistic images that would have awed Michelangelo are seen every day on calendars and magazine covers. The impact of photography has been as significant as that of the printing press, and it has changed the world in a very short time. Almost from the moment of its invention in the 1830s, the photograph was greeted with enthusiasm and awareness of its historical importance. It was several decades, however, before photography became truly accepted as one of the art media.

TECHNIQUE AND DEVELOPMENT

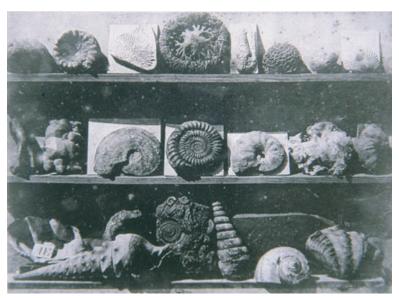
The long road to the photograph began around the eleventh century, when the first **camera obscura** (7-1) was developed. Literally meaning "dark room,"



7-1 Camera obscura.

such room-sized cameras were first used to study eclipses. By preventing all light from entering a room and then cutting a small hole in a window shade, a person could project an inverted image of the sun onto the opposite wall. However, studying an astronomical event was not the only way to use the camera. A camera obscura can also project an upsidedown image of the outside world using ordinary daylight. By the 1600s, a lens helped focus images more clearly. Then in the 1700s, a table model of the camera obscura became available. With the help of a small mirror inside, it projected a right-sideup image on a screen that artists could use for tracing. The lens could be moved inward and outward depending on whether a close-up or long view was required. In fact, really only one thing separated this camera obscura from our modern camera—the lack of a light-sensitive material to record the image.

The search for a way to permanently capture a camera's image took place during the late 1700s and early 1800s, a period of intensive scientific investigation of the natural world. Botanical artists, for example, were making extremely detailed drawings of plants but were well aware that the artist's eye was technically limited. A more scientific method of observation was felt to be needed.



7-2 Louis-Jacques-Mandé Daguerre, *Collection of Fossils and Shells*, 1859. Daguerreotype. Conservatoire Nationale des Arts et Métiers, Paris.

A series of discoveries and inventions by scientists (mostly amateur) around Europe finally resulted in the first permanent photographic image—the daguerreotype, introduced to the world by a French painter, Louis-Jacques-Mandé Daguerre in 1839. His pictures were produced by a complex chemical process. First, silver-coated copper plates were made light sensitive by exposure to iodine vapor. After the plate was exposed to light, the image was developed (made visible) by treating it with mercury vapor. The image was fixed (made permanent) by bathing it in a solution of salt. Daquerre's success made him famous and the toast of Paris by the end of the year. "Daguerreomania" soon swept Europe and the United States. His pictures were said to have defeated time.

There were, however, technical limitations to the daguerreotype. Portraits were the most popular kind of early photographs, but because an exposure of thirty minutes might be required, they tended to show very grim people trying desperately not to move. The most successful of Daguerre's images were still lifes, as in his *Collection of Fossils and Shells* (7-2). These early pictures did not use film, and only a single image could be printed. The first photographic film using the "negative–positive principle" was invented by an Englishman, William Henry Fox Talbot. His development of *negatives* made multiple prints from a single image possible and created the kind of photography that we know today.

Talbot's photograph of his *Reading Photographic Establishment* (**7-3**) from 1844 shows how quickly entre-

preneurs realized the commercial possibilities of the new medium. Some artists, however, began to explore the aesthetic rather than the commercial possibilities of photography. In the 1860s, Julia Margaret Cameron attempted to capture the essence of beauty through her photographic portraits. Cameron only began taking photographs at the age of forty-eight, when she received a camera as a present. As a middle-class Victorian wife and mother, she worked as an "amateur" artist, producing striking images that reflect both her personal vision and the ideals of the period.



7-3 William Henry Fox Talbot, *Reading Photographic Establishment*, 1844. Science Museum, London.



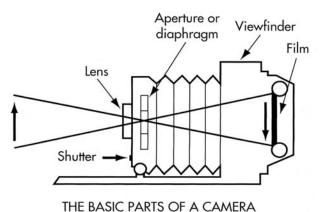
7-4 Julia Margaret Cameron, *Pomona*, 1872. Private Collection.

Cameron's close-up images of her friends and family have a monumental, mythological quality, each face representing both an individual and a perfect type of beauty. In *Pomona* (7-4), Cameron presented her young sitter, Alice Liddel, as the goddess of fruit trees, dressed in an ethereal white gown and surrounded by lush vegetation. Yet the subject's face radiates intelligence and assertiveness, suggesting that our view of the ideal Victorian woman as self-effacing and demure may be inaccurate. As a child, Alice had also modeled for a true amateur photographer—Lewis Carroll. In fact, she is the Alice who was the inspiration and model for his famous children's books, *Alice's Adventures in Wonderland* and *Through the Looking-Glass*.

As the nineteenth century progressed, scientists in Europe and the United States continued working on technical improvements. By 1880, film that needed to be exposed for only 1/1000 of a second was available. The daguerreotype had long since been eclipsed, replaced by a series of photographic media.

THE CAMERA

All cameras share five basic parts (**7-5**): a *light-tight box*, which forms the structure of the camera and prevents any unwanted light from hitting the film; a **lens**, which focuses the light onto the film; a **shutter**, which is triggered by the photographer and controls the time of the exposure; an **aperture** (or diaphragm), an adjustable opening that controls the amount of light entering the camera; and the *viewfinder*, which permits the photographer to see what the camera sees.



THE BASIC PARTS OF A CAMERO

7-5 The basic parts of a camera.

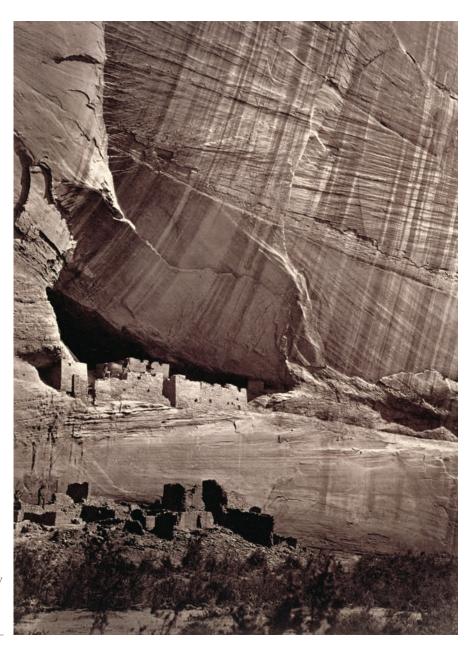
In the earlier years of photography, camera equipment was rather cumbersome and expensive, but in 1887, an American named George Eastman introduced a simple box camera called the Kodak. This camera would soon make taking a photograph as common as taking a train ride. Eastman's slogan was "you press the button, we do the rest." After shooting a roll of one hundred exposures on the Kodak (which reportedly got its name from the sound the shutter made), the photographer would send the entire camera to the factory in Rochester, New York. At the factory, the film would be removed and developed, and a new roll would be loaded into the camera. Within twenty years of the first Kodak camera, George Eastman was in charge of the world's largest photographic manufacturing company. In the years since then, Kodak and other companies have introduced new precision lenses, electronic flashes, 35mm film, color film, instant photography, digital photography, and many other advances that make up modern photography.

STYLES OF PHOTOGRAPHY

Straight Photography

One way the new invention called photography (literally, "drawing with light") was first used was to make images of distant, exotic lands available to the public. Expeditionary photography, the precursor to *landscape photography*, was a field for adventurous artists. Timothy O'Sullivan, one of the pioneers of this medium, began his career as a Civil War photographer. After the war he traveled with geological survey groups throughout

the Western United States. O'Sullivan had to bring his camera, chemicals, and plates with him, all of which were very heavy. He also brought along a portable darkroom in an ambulance pulled by mules. Despite these handicaps and the newness of the medium, his photographs of the Canyon de Chelly in Arizona (7-6) are among the most beautiful landscape photographs ever made. The immense scale of the canyon is made apparent by seemingly tiny ruins of buildings (just one of the many clearly depicted details). Opposed to the overall feeling of great height are the many tilting horizontal parallel lines, which provide variety and help unify the whole composition.



7-6 Timothy O'Sullivan, Ancient Ruins in the Cañon de Chelle, N.M., in a Niche 50 Feet above the Present Cañon Bed (now Canyon de Chelly National Monument, Arizona), 1873. Albumen Print.

The huge camera that O'Sullivan carried out West was similar to one used by many large-format fine art photographers today. However, the smaller-format 35mm camera—lightweight and with lenses capable of taking pictures with very fast exposures—overwhelmingly became the camera of choice for twentieth-century photographers. Its portability opened up many subjects for the photographic eye, from the top of Mount Everest to the depths of the sea.

As cameras became lighter and more portable, photographers were able to take pictures that recorded the moments of everyday life and even motion. One such photographer was Jacques-Henri Lartigue, who received his first camera when he was just seven years old. He used it to record and hold onto the joys of upper-middle-class life in France before World War I. The spoiled darling of a welloff family, his life as photographed seems to have been made up of all play and no work—silly pet tricks, backyard amusements, gymnastics and sports, fashionable ladies showing off their costumes and walking their dogs, dances, fun parks, theatrical performances, and trips to the beach and the races. As a young man of the early twentieth century, Lartigue was particularly fascinated by airplanes and fast cars, and he photographed these subjects many times.

In Delage automobile, A.C.F. Grand Prix (7-7), Lartigue conveys the speed of the automobile age through the elliptical whirling wheel that seems to run across the print, the streaks of the roadbed, and

the backward slant of figures in the background, as if left behind by the sharply focused driver on the right-hand side of the picture. Beyond his technical innovations, however, Lartigue's great strength as a photographer was his outstanding eye for a strong composition, enabling him—even as a youth—to create visually memorable images.

Another French photographer, Henri Cartier-Bresson, utilized the 35mm camera's speed to capture what he called "the decisive moment," an instant that reveals the truth. His *Behind the Gare Saint-Lazare*, *Paris* (7-8) shows the unique ability of photographs to freeze a single moment in time. Forever poised above the puddle that reflects his image, a silhouetted figure is caught mid-jump as he leaves the station. Cartier-Bresson is categorized as a *straight photographer*, one who does not tamper with the negative or image in any way once it has been taken. Straight photographers value honesty above artistry, yet here artistry results as well from the almost-abstract design created by the visual elements unexpectedly framed by Bresson's camera.

A type of straight photography that became increasingly important in the twentieth century was



7-7 Jacques Henri Lartigue, *Delage automobile, A.C.F. Grand Prix.* Dieppe circuit, June 26, 1912. The Minneapolis Institute of Arts. The Kate and Hall J. Peterson Fund.

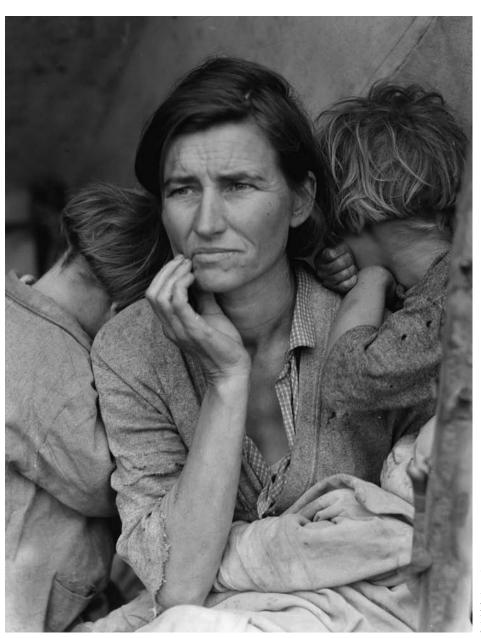


7-8 Henri Cartier-Bresson, *Behind the Gare Saint-Lazare, Paris*, 1932. Gelatin silver print, 20" × 16".

documentary photography—authentic, unretouched photographs that record important social conditions and political events. One of the great strengths of photography has been its evident truthfulness, the idea that a photograph cannot lie. Many photographers have valued the medium as a tool for social reform as much as a means of artistic expression. These goals are not mutually exclusive. Although we have seen their haunting images many times in textbooks, we may not think of these pictures as art. Yet these individuals saw themselves as social realist artists in the service of humanity.

During the Great Depression, the U.S. government hired photographers like Dorothea Lange to

provide pictures illustrating the miserable living conditions of Americans who were suffering from hard times. Working for the Farm Security Administration (FSA), Lange and other professional photographers traveled the country in search of evidence to support the New Deal programs. In her famous image of a migrant mother and her children (7-9), the composition draws our attention to the mother's face, ensuring that we become conscious of her worry and pain. Two of her younger children press against her, hiding their faces in her sides, while she holds a baby in her lap. Lange also provided reports on her subjects. Her notes for this photograph read, in part:



7-9 Dorothea Lange, *Migrant Mother, Nipomo Valley,* 1936. Gelatin silver print. Library of Congress, Prints and Photographs Collection.

Camped on the edge of a pea field where the crop had failed in a freeze. The tires had just been sold from the car to buy food. She was thirty-two years old with seven children.

This single image has become a symbol of the dispossessed families of Depression-era America, like those described by John Steinbeck in *The Grapes of Wrath*. Often reproduced without Lange's descriptive information, the image still conveys a heartbreaking story and retains its ability to move us more than seventy years after it was taken.

Beyond Reproduction: Fine Art Photography

Although Europeans like Julia Margaret Cameron had experimented with the artistic potential of photography for decades, it wasn't until Alfred Stieglitz founded the Photo-Secession group in 1902 that American photography began to be accepted as a fine art medium. Stieglitz was a man of great energy and vision. He edited the magazine Camera Work to promote photography. In its first issue, he promised to show "only examples of such work as gives evidence of individuality and artistic worth, regardless of school." His 291 Gallery in New York City exhibited photography alongside painting, prints, and sculpture and was one of the most advanced galleries in America. The first in this country to show Modern Artists like Matisse and Picasso, the 291 Gallery became a gathering place for young artists. Stieglitz believed that the eye of the photographer





7-10 Alfred Stieglitz, The Steerage, 1907.

was more important than the sophistication of his or her equipment. His own photographs, like *The Steerage* (7-10), which he called a "picture of shapes," reveal his ability to find design and life in unposed images. His patience was legendary; he would stand for hours, no matter what the weather, waiting for the right moment.

His own eye for the work of other photographers was also of the highest quality. Camera Work introduced the finest and most advanced photographers to the public. One was Edward Steichen, whose long and varied career in photography began as Stieglitz's assistant. Like his mentor, Steichen believed photographers should be free to manipulate their images. His portrait of the French sculptor Rodin (7-II) pondering his famous Thinker (see Chapter 14) is actually the combination of two separate images

taken in the sculptor's studios. Steichen played with the chemistry of photography to achieve more painterly effects.

By the 1930s, artists had begun to approach photography as a purely artistic media. In a completely different approach to photography-as-art, the experimental artist Man Ray grasped that the supposedly realistic medium of photography was actually much more subjective than most people realized. Its images could be very deceptive. By varying position and lighting, a photographer could present a subject in many different ways and produce contradictory truths. Ray also realized that photography had the power to show worlds that were not even part of ordinary visual reality. Experimenting with the medium as a purely artistic form, Man Ray invented a new kind of photograph that did not require a camera. He called it a "rayograph," made by placing objects on photographic paper in a darkroom and then exposing the paper to light. In Le Souffle (7-12), mysterious waves seem to penetrate a transparent machine. The image is bizarre and otherworldly, using effects not possible in any other medium.

While Ray explored photographic innovations, Edward Weston transformed ordinary objects into abstract compositions. In *Pepper 30* (7-13), he focused on a single pepper, lighting it as if it were a precious work of art. Seen in this way, the pepper loses its normal identity as something to eat, and becomes instead a voluptuous series of curving lines and undulating shapes. There is something *anthropomorphic* (human-like) in its twisted form and sensuous flesh.

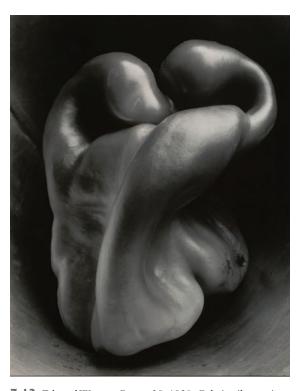
Photomontage

The widespread reproduction of photographs has given artists new materials for collages, providing an enormous palette of realistic images. The imaginative combination of photographic images is called **photomontage.** With this medium, artists can create impossible pictures that still seem connected to the real world.

Between the world wars, the German photomontage artist Hannah Höch used found images from publications like newspapers and magazines—what has been described as the debris of modern life. By connecting heads, bodies, and machines, Höch's photomontages showed how people were becoming dehumanized cogs in the industrial process. In *Cut with the Kitchen Knife* (7-14), machinery overwhelms the characters, creating confusion. Who is responsible for this world? In the upper-right corner, we see



7-12 Man Ray, *Le Souffle* (from the portfolio *Electricité*), 1931. Rayograph. The Museum of Modern Art, New York. NY.



7-13 Edward Weston, *Pepper 30*, 1930. Gelatin silver print. The Museum of Modern Art, New York, NY.



7-14 Hannah Höch, Schnitt mit dem Küchenmesser Dada durch die erste Weimarer Bierbauchkulturepoche Deutchlands (Cut with the Kitchen Knife through the Last Weimar Beer Belly Cultural Epoch), 1919. Staatliche Museen Preussbischer Kulturbesitz, Nationalgalerie, Berlin.

RT ISSUES Can Art Be Obscene?

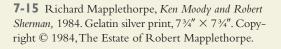
he questions of what is obscene and whether art should be banned if it is obscene have haunted modern artists for more than a century. Many important works of art that were once condemned as obscene in the past—for example, Manet's *Le Dèjeuner sur l'herbe* (17-4)—are now considered masterpieces. Even in the twentieth century, art was put on trial because of sexual content. In literature, the bannings of James Joyce's *Ulysses* and D. H. Lawrence's *Lady Chatterly's Lover* were battled in the courts and ultimately overturned. The verdicts were seen as important victories for individual civil liberties and artistic freedom. Today, the books are considered modern classics and are traditional parts of college and university curricula.

More recently, the photographs of Robert Mapplethorpe brought national attention to the conflict between artistic freedom and what community standards call obscene. Although relatively few Americans had seen his pictures, Mapplethorpe's name became a notorious household word in 1990. Mapplethorpe was brought up in a middle-class Catholic home in suburban New York. Early in his art career, he was already exploring the limits of conventional morality by collaging sexually explicit photographs into sculptural frames that he made. As he developed as an artist, he became a successful commercial photographer. Few have questioned his marvelous technical skills. His prints brought an almost glamorous quality to whatever he portrayed, whether nudes or flowers. It is his photographs' erotic atmosphere that has disturbed many viewers.

In Ken Moody and Robert Sherman (7-15), Mapplethorpe idealizes his subjects; they are living men but seem like statues. Their flesh looks as if it is carved out of the purest black and white marble. The directional lighting envelops them in a soft, glowing light. The geometric composition is uncomplicated and dramatic, a formal

progression of simple forms from white to gray to black. The image has a timeless, Classical quality.

A man and a woman, or two women posed in the same manner by Mapplethorpe, would probably have not been controversial. But Mapplethorpe shows two men who appear to be naked and who are from different races as well. Despite the serene beauty of the photograph, the sexual feeling and interracial nature of the image has aroused a great deal of hostility. Many people cannot accept a male artist's loving attitude toward other men. Even more controversial were photographs of male sadomasochistic lovers and an innocent child in a park who seems unaware that anyone cares that she wears no underwear.





ART ISSUES

Mapplethorpe's pictures challenge the morality of his viewers. He brought the same glamorous and artful approach to whatever he portrayed, including graphic sexual acts and "kinky" paraphernalia. What many expect to remain hidden, the photographer openly exhibited as beauty, without apparent shame. One question for viewers is whether Mapplethorpe transformed his subject matter into art, or is this subject matter so taboo that it is not possible art material? What is the line between an artist's rights to explore and exhibit his or her interests and the need to protect society from what is obscene?

The controversial nature of Mapplethorpe's images became a national issue when a retrospective of his work was organized with funds from the National Endowment for the Arts (NEA). The exhibition traveled through many cities in the United States and became the subject of intense public scrutiny. A museum director was put on trial for allowing the exhibition to be shown in Cincinnati, Ohio. Even though the museum director was ultimately acquitted, the Mapplethorpe retrospective controversy raised important new questions: Should public funds support artists who make works that some consider obscene? Should morality enter into funding decisions? What is the proper role for taxpayer dollars in the support of the arts? After the trial ended in Cincinnati, the NEA became the next battleground over artists' rights and responsibilities.

The NEA was established by Congress in 1965 to encourage and support national progress in the arts. In the more than forty years since its founding, the NEA has become the largest single supporter of the arts in the United States. In the visual arts, it has distributed grants to museums, arts organizations, and individual artists in cities and small towns across America. It also supports dance, music, film, video, and public broadcasting. Its founding legislation prohibited any interference with the content of art it supports. In light of the controversy over the Mapplethorpe exhibition and others, congressional amendments were proposed to change the charter's goal of noninterference by establishing limits to the content of the art the NEA could support. Many in Congress felt they had the responsibility to determine what art taxpayers' dollars supported. They said that not giving grants to controversial art was not the same as censorship. Artists would remain free to do what they wanted, just not at public expense.

In the arts community, there was widespread fear of a chilling effect on artists and art organizations similar to the McCarthy era in the 1950s. Would artists be less daring than before? Would museums show only "safe" art? Which was more dangerous, someone being offended or censoring freedom of expression? Ultimately, in the summer of 1990, the Senate and the House reached a compromise when both agreed to cut \$45,000 from the NEA budget, the amount used to fund the Mapplethorpe and another controversial exhibition, and to, in effect, punish the organization for its decision to fund these exhibits (it also killed an amendment with much graver cuts). The NEA (capitulating to pressure or returning to common sense, depending on your point of view) changed its procedures, requiring anyone who was awarded a grant to sign an oath stating their work would not be obscene:

Including, but not limited to, depictions of sadomasochism, homoeroticism, the exploitation of children, or individuals engaged in sex acts.

top-hatted figures of respectability along with an old general, symbolizing bankrupt authority. The artist pokes fun at this type of authority figure toward the center of the image by setting the head of a proper bourgeois gentleman on top of the body of a belly dancer. Hoch's photomontages are satirical, even funny, but her political message was quite serious.

CONTEMPORARY APPROACHES

Contemporary photographers continue to work in all of the styles discussed in this chapter. One who pursues the documentary tradition is Brazilian artist Sebastião Salgado, who has produced several epic series of photographs recording the plight of the poor and refugees at the turn of the twenty-first century. For instance, his series "Workers" took him

to twenty-six countries over four years, from 1986 to 1992, while his recent series "Exodus" exposes the plight of migrants around the world. Unlike Lange, however, Salgado's work is not underwritten by the government. Instead, Salgado is a successful commercial photographer, selling pictures through Amazonas Images, the photo agency he created with his wife Leila, and exhibiting his prints in museums and galleries.

Salgado's images often have a cinematic quality, as with *Gold Mine, Serra Pelada, State of Para, Brazil* (7-16). Hundreds of miners appear like a cast of thousands in a blockbuster film. Sadly, however, these are real workers, some of the fifty thousand who slave under brutal conditions in these mines for pitiful wages.

While Salgado uses his art to record devastating realities, other contemporary photographers, like Sandy Skoglund, take advantage of the commonly held faith in the truthfulness of photographs to confuse the viewer's sense of reality. Her *Radioactive*



7-16 Sebastião Salgado, *Gold Mine, Serra Pelada, State of Para, Brazil,* 1986. Iris Print, 24" × 20".



7-17 Sandy Skoglund, *Radioactive Cats*, 1980. Cibachrome, 30" × 40". © 1980 Sandy Skoglund.

Cats (7-17) is anything but a straight photograph. Every part of what we see has been carefully planned and arranged. Yet, this scene did exist and was photographed. Part of the artistic process Skoglund follows is the construction of her subject, including posing and costuming her models and applying fluorescent colors to ceramic cats she created. Following the lead of pioneer artistic photographers like Man Ray, Skoglund does not respect or believe in the neutrality of photography. Instead, she uses its power of deception for creative purposes. The result is a vivid fantasy of what the world might be like after a nuclear war.

The ambitious and theatrical photographs of Cindy Sherman are such elaborate productions that they almost constitute performances. For them, Sherman stars in an endless assortment of roles, from innocent hippie to tired housewife, young girl at her first ballet recital to an autistic patient in an asylum.

Many critics have seen her pictures as studies of women's roles in the popular media. But as her

pictures have become more complex visually, they have also shown less stereotypical women and situations. Untitled (7-18) shows Sherman as an apparent murder victim on what appears to be an isolated forest floor. Her throat is cut, her clothing soaked and stained. Flecks of dirt on her head and neck imply a struggle took place. Insects are hovering over her bruised face. The viewer is drawn magnetically toward the brightly lit blond-wigged head with glazed blue eyes. Notice how her head is set at the crossing point of the diagonals made by her body and the line of green moss. To produce such a carefully composed and complex image, Sherman had to become a special-effects wizard, controlling lighting, sets, makeup, and costumes. Her most successful images evoke setting and subject without making us aware of how they were constructed. In other words, while totally artificial, they seem natural.

Unlike Skogland's or Sherman's photographs based on carefully planned sets, Jerry Uelsmann's



7-18 Cindy Sherman, *Untitled # 153*, 1985. Color photograph, 67 ½" × 49 ½". Courtesy of the Artist and Metro Pictures.

otherworldly environments are constructed imaginatively in the darkroom. Photographs like *Meditation Mystery* (7-19) mix images of natural elements to create enigmatic worlds that appear dreamlike and mythic. Uelsmann works in a darkroom with eight enlargers, each holding a negative with just one of the elements for the final image. He blends the images by moving a sheet of photographic paper from enlarger to enlarger and exposing only part of the paper at each station. For Uelsmann, the "decisive moment" described by Henri Cartier-Bresson occurs in the darkroom—"a certain moment when things just come together." His goal is simply "to amaze myself" with scenes that are "emotional, irrational, intellectual, and psychological."

Today, most viewers assume when they see a Uelsmann photograph that it was made on a computer, but his multiple-image scenes continue to be made with the same traditional photographic tech-

niques he has used for forty years. He is not opposed, however, to computers or image-editing software and acknowledges their value to many photographers.

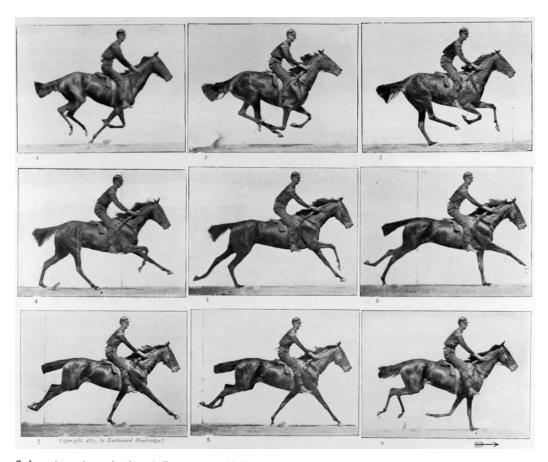
Photography, which revolutionized image-making at the beginning of the twentieth century, is now in the midst of its own revolution. The invention and acceptance of digital photography is turning out to be more momentous than even the use of computers and imaging software. Digital cameras have become so popular that traditional cameras, and the photographic methods that went with them, may soon seem as old-fashioned as the daguerreotype. Famous camera-makers like Nikon and Kodak are abandoning traditional cameras for their digital counterparts. There are few remaining manufacturers of blackand-white papers for the darkroom. Although film and darkrooms may still be used by artists interested in historic techniques, the digital arts described in the next chapter are quickly moving to the forefront of photographic innovation. But the impact of the computer on art is much broader. It is even changing the nature of the art world itself.



7-19 Jerry Uelsmann, Meditation Mystery, 2001.

New Media: Time and Digital Arts

The story of art was transformed in the past century by new media developed from new visual technologies. As we have seen in the last chapter, artists seized on photography as a new medium of expression from the moment it was invented. The marvels of motion pictures, video, and most recently, computer technologies were also embraced by artists as new paths for exploration. While art critics, gallery owners, and museum curators were busy debating whether these new technologies could be used to create art, artists simply plunged ahead. In the twenty-first century, this pattern has continued, and if anything the pace has quickened.



8-1 Eadweard Muybridge, Galloping Horse, 1878.

TIME AS AN ARTIST'S MEDIUM

A revolution in transportation and communication began in the early nineteenth century. Stagecoaches were replaced by railroads on land and sails by steam on the seas. The new speed of travel made distant places more accessible and started an age of tourism not only for the rich, but also for the newly arrived merchant class. Messages that once took months to be delivered became nearly instantaneous with the inventions of the telegraph and telephone and the laying of the transatlantic cable. Speed had become a mark of the age, and artists tried to portray it.

But how can you portray speed in a single image? In the early days of photography, critics celebrated the photograph as a way to defeat time. But some artists, like Eadweard Muybridge, used photography as a way to include time in their works. Muybridge was a professional photographer whose fame rests on his exhaustive studies of figures and animals in motion.

His best-known series from the 1870s studied a horse galloping. Financed by a millionaire sportsman, it provided an answer to a question that had been debated by artists and the racing world for centuries: when a horse runs, is there any moment when all of his legs are off the ground? Most artists believed that such a moment was not possible, because the horse would fall to the ground. Muybridge's photographs (8-1) proved conclusively that there were such moments, and his images were printed on the cover of *Scientific American* and in European scientific journals. One journalist wrote, "Mr. Muybridge has completely exposed the fallacy of all previous ideas on the subject."

Muybridge's photographs were collected in a series of books on locomotion. An encyclopedia of movement, they include women walking down stairs, men lifting heavy stones, babies toddling, and all sorts of animals in action. When these images were made available in print, artists poured over them. For example, Edgar Degas (see Chapter 17) used the famous horse photographs as the basis of his many paintings of racetracks. The modern enthusiasm for science also damaged the reputation of some older artists. The most famous and popular horse painter of the era, the Realist Rosa Bonheur (see Chapter 16), was ridiculed for the inaccuracies of her depictions after Muybridge's photographs were published. Muybridge's volumes on locomotion remain standard reference books for artists and animators even today.

The new age of transportation proceeded non-stop with the start of the twentieth century. The arrivals of the automobile and the airplane were greeted with particular enthusiasm by the Futurist artists in Italy (see Chapter 18). Feeling the heavy burden of trying to create new art surrounded by the grandeur of Roman, Renaissance, and Baroque art, the Futurists saw the new age as an opportunity to shake off this great weight and "free Italy from her numberless museums" and "useless admiration of the past." F.T. Marinetti wrote in *The Futurist Manifesto* that "the splendor of the world has been enriched with a new form of beauty, the beauty of speed."

To depict speed and movement, Futurists like Giacomo Balla looked to the motion studies of photographers like Muybridge. Balla's *Dynamism of a Dog on a Leash* (8-2) depicts an everyday sight in the city—a woman walking a dog—in a new way. As in a multiple exposure, we can see the frenetic actions of the small dachshund trying to keep up with its master. The chain-link leash vibrates almost musically. The range of motion of boots, paws, tail, and ears form blurred arcs of dynamic action. Although this type of view is familiar—if still amusing—today, when first painted it personified the thrill the Futurists felt for life in the new, vital modern city. It celebrated a new way of seeing and a new era for art.



8-2 Giacomo Balla, Dynamism of a Dog on a Leash, 1912.

Moving Pictures

The invention of motion pictures offered a much more direct way to represent motion. In 1888, the famous American inventor Thomas Edison met with Muybridge to discuss a revolutionary idea. Edison thought that by combining the cylinders of his phonograph with Muybridge's multiple-image photographs, he might be able to make a system that would show moving pictures. Edison eventually succeeded when he abandoned the idea of using cylinders and switched to film in long bands. In 1893, he unveiled his first motion picture camera, the *kinetoscope*. One of his first films that year showed blacksmiths at work, based on a similar series by Muybridge.

But Edison's first films could only be seen by one person at a time. In 1895, the Lumière brothers in Paris developed a projection system. Their first films were simply scenes of ordinary events—workers leaving a factory, a train coming into a station. The fact that the pictures moved was thrilling enough for audiences.

By the early 1900s, however, audiences were enjoying comedies, fantasies, and dramatic stories on film. France was the leading film producer in the world up until World War I, when the United States took over the role that it continues to have to this day.

In most new media, early practitioners tend to utilize the conventions of a previous medium. For example, the first photographic artists tried to recreate the look of traditional painting to make their work appear more serious. It was only later that photographers understood and respected the unique qualities of photography.

So it is not surprising that in the early days of film, directors shot their movies to resemble theater productions. Audiences were accustomed to the traditions of the stage. When directors began to try new techniques, the results initially shocked audiences. It has been reported that when the legendary American director D.W. Griffith first showed a close-up of an actor's head, the audience screamed. They thought that the actor had been beheaded.

By 1928, when the Surrealists Luis Buñuel and Salvador Dalí (see Chapter 18) made their short film *Un Chien Andalou (The Andalusian Dog,* **8-3**) in Paris, the conventions of film techniques were well understood by audiences. But the artists had no interest in making a conventional film. Their goal was to shock and repulse their audience.

Surrealist artists believed in an art that depicted dreams and the repressed passions of the unconscious mind. Buñuel and Dalí saw film as an ideal artistic medium to construct the irrational world of a dream.

In a film, like a dream, whatever you see appears real at the time. According to the artists, the script was constructed from two of their dreams. They described their collaboration as "magical rapport." While *Un Chien Andalou* (a title that is meaningless) begins with "once upon a time," the film is no fairy tale and contains some of the most awful scenes in the history of cinema. It is a Surrealist love story where repressed passions form an illogical nightmare.

The film begins with one of the most disturbing and unforgettable scenes in cinema history. Puffing on a cigarette, Buñuel sharpens a razor, with cheerful tango music in the background. He then calmly slices the heroine's eye with a razor as a cloud passes through the moon. In the next scene, she is unhurt. The male lead stares in fascination at his hand, drawing the interest of the woman (who he loves). The camera slowly focuses on the hand and the audience sees that it has a deep hole in the palm and ants are crawling out of it. The same man later moves his hand across his mouth and, when he's done, his mouth is gone. He wipes again and it is covered with the armpit hair from the woman. Outside, another young woman stands in traffic pushing an amputated hand with a stick. When she is killed by a car, it arouses the man's passions and he begins chasing his girlfriend around her room. To attract her admiration, the man drags two grand pianos into the room with great effort, each with a bleeding horse's head on top and a priest tied to it (one is Dalí).

In *Un Chien Andalou*, time is confused. Characters die and return in the next scene. Toward the end of the film, a title reads "16 years before" but appears to be on the same day. It ends with a beach scene where the film's two lovers are dead and buried in



8-3 Luis Buñuel and Salvador Dalí, still from *Un Chien Andalou*, 1928.

the sand up to their chests. Because of the disturbing way the artists utilized film conventions to sabotage reality (along with its capacity to shock an audience many decades later), *Un Chien Andalou* remains a landmark in film and art history.

Video Art

The same year that Buñuel and Dalí completed their short movie in Paris, a new technology was tested in New York City that would eventually surpass the popularity of movies. In an RCA studio, an image of a Felix the Cat doll on a rotating record turntable was sent over the airwaves. Through the 1930s, regular broadcasts of what were originally called "radio movies" began on the first networks. However, the audience remained very small. Even by 1945, only seven thousand homes in the United States had television sets. It wasn't until the 1950s that television took its place as the center of American cultural life.

Like photography and movies before it, artists seized upon the newly popular medium and transformed it into an art medium. Known as **video art**, it is one of the oldest of the electronic media, but can still be said to be in its formative years. As the Korean-American artist Nam June Paik (who originated this art form) reminded his audiences, it was a long time after the invention of the printing press before there was a Shakespeare.

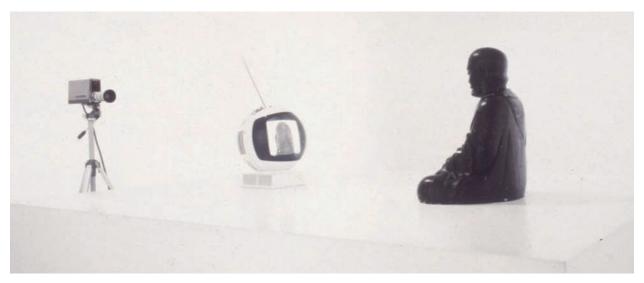
Paik was born in Korea in 1932, but his family was forced to leave in 1949 during the Korean War. At this time, Paik was a talented young music student. He later lived in Hong Kong, Tokyo, Germany,

and the United States. In 1963, Paik's love affair with television began. For his first solo exhibition, called "Exposition of Music—Electronic Television," he filled a German gallery with thirteen used television sets, along with pianos covered with found materials like doll's heads and photographs. A fellow artist, Joseph Beuys (see Chapter 9), entered the gallery and demolished a piano with an axe. Intentionally or not, that act signified the conversion of Paik from musician to electronic artist.

Paik became television's playful poet, an artist constantly expanding video art's vocabulary. Working with electronic engineers, he was always interested in being at the cutting edge, developing equipment to create increasingly more complex video imagery. In the 1960s, he already experimented with the color synthesizers and editors that are now in regular use by conventional broadcast television.

Conceptually, some of Paik's most thought-provoking (and humorous) work concerns the relationship of television imagery to reality. In *TV Buddha* (8-4), a traditional sculpture of the Buddha appears to be watching his own "live" image intently on a monitor. The Buddha contemplates his electronic self, apparently mesmerized by television like any child in America. Oddly, the effect is not only comical but also peaceful; the empty setting and unchanging nature of the image is reminiscent of the Zen Buddhist goal of attaining nonbeing.

Television is rarely thought of as a spiritual medium, but like the videos of Paik, Bill Viola's art can seem mystical. While Paik's work often combines sculptural installation and video, Bill Viola's



8-4 Nam June Paik, TV Buddha, 1974–1982. Mixed media, 55" × 115" × 36". The Museum of Modern Art, New York.

are usually presented in a purer atmosphere. To see The Crossing (8-5, 8-6), you leave the bright white walls and lights of the gallery and enter a large dark room with black walls. Two screens hang from the ceiling, each showing a man who emerges out of the darkness. In one, he stops and stands unhurt in a mounting fire, and in the other rain begins to fall on him. Because both videos are run in a repeating loop, depending on when you enter the room, the videos can be dark and nearly silent, or bright and loud. Ultimately, the man is engulfed in an inferno of bright yellow and orange flames, which roar around him. On the other screen, the slow drip of water turns into a deafening downpour of rain covering his body in blue and white. The figure doesn't appear to suffer, but instead seems to be transformed.

Viewers of *The Crossing* are transported into visions that relate to our experience but become intensified beyond reality. Critics have compared Viola's videos to ancient myths and biblical visions, and he has not rejected their analyses. Viola has said, "The search for something deeper than this world is a common aspect of all religions." He doesn't believe that answers can be meaningful "without connection to a process of transformation." For him, "video is a medium that deals with movement, change, and transformation."

Those qualities can certainly be found in *Sip My Ocean* (8-7), a video by the Swiss artist Pipilotti Rist, but the mood is quite different. Viewers plunge into an underwater paradise. The camera explores a world

filled with rich, saturated colors and light. Traveling with us as we look at the plants and sea life is a frolicking young woman in a bikini. The soundtrack is Rist singing.

Apparently all is not well in paradise; the song is Chris Isaak's "Wicked Game," a tale of a lover's betrayal. Household objects float down from above, polluting paradise with plates and cups, records, and children's toys. The tone of Rist's voice changes from sweet singing to shrieking the lyrics ("No, I don't want to fall in love"). But unlike the work of Bill Viola, Rist's video never becomes dark or frightening. Because everything is floating in luminous light and brilliant colors, there is a buoyant and dreamy mood. The young swimmer remains playful and never seems worried or concerned. We, too, remain enchanted, perhaps because the clear, blue ocean is bigger than any domestic issues.

Rist (who combined her name, Charlotte, with that of her childhood heroine, Pippi Longstocking) studied in Vienna, Austria, and Basel, Switzerland. After school, she directed music videos for European bands and sang in a female rock group. She continues to compose music for her own works, which are often compared to music videos. Water and travel are recurring themes in Rist's work. Like other video artists, she is enthusiastic about the arrival of digital video technologies. In the past, she had to supervise editors and technicians to get the results she wanted. Today, she can work directly on her videos, allowing



8-5 Bill Viola, still from The Crossing, 1996. Photo: Kira Perov



8-6 Bill Viola, still from *The Crossing*, 1996. Photo: Kira Perov



8-7 Pipilotti Rist, *Sip My Ocean* (Schlürfe meinen Ozean), 1996, audio video installation by Pipilotti Rist (video still). Courtesy the artist and Hauser & Wirth, 7liidh/Inndon

her work to have not only more complex effects, but more important, a more "experimental quality." Like Rist, artists all over the world are discovering new ways of working in the new digital era.

THE ARTIST AND THE COMPUTER

The Computer Age has transformed so much in our world; it is not surprising that it has changed the art world as well. The arrival of the *digital arts* (or *digital media*), the art forms created with the aid of computer technology, is affecting just about every one of the traditional art media. Although the history of art is filled with examples of new media transforming the way artists work, it is unprecedented for artists to be given so many new techniques in so short a period and for their impact to be so pervasive. Certainly, many of the new media can be understood as digital versions of traditional tools, but some have even changed the nature of the artist's process itself.

A particularly revolutionary tool is one that seems simple—the greatest eraser in the history of art—the "undo" command. In the past, artists have had to live with the fear that any simple action (adding a new color, a chipping movement by a sculptor, or erasing a line) could in the end be a disaster and ruin a day's worth of work or even the whole work. To be a successful creative artist, one had to manage that fear and move on. Today, however, digital artists "work with a net" because they can "undo."

And most digital media software allows one to undo not just the last action but five, ten, or even a hundred previous steps. Some contain a "history palette," where all changes are recorded and a mere click can bring a picture back to a previous state from hours earlier. History can even be used as a drawing tool. By drawing with a history eraser, you can bring back a past version wherever you erase.

When an artist or designer can undo any experimental action instantly, or even move back and forth in time, he or she can work without fear of disaster and feel free to try just about anything. This is an extraordinarily liberating experience. Compare today's digital painter to a Renaissance fresco artist (see Chapter 5), who had to complete all of his or her painting before the wall dried and sealed the picture forever.

It is not just that artists have been given more tools. In an age of computers and high-speed global communication, the art world is in the process of being transformed. Because of the World Wide Web, new avenues for collaboration among artists and promoting artist's work have opened up. The gallery and museum system can even be bypassed entirely if artists choose to distribute their art around the globe via the World Wide Web.

Nevertheless, while the new digital media break new ground, they remain fundamentally connected to traditional media. This is most obvious when software is named *Illustrator* or *Painter*, but even within uniquely titled software packages, many of the most important tools bear the name of their analog parents. When a digital artist "cuts and pastes," the name

comes from what was once an everyday activity of a traditional graphic designer—cutting sheets of type and pasting them on boards. Digital photographers now use software to burn in or dodge parts of their images, just like traditional photographers in the darkroom. The "onion-skin" function of animation software is named for the translucent paper that hand-drawn animators used in the time of Walt Disney to see previous drawings. Artists' webpages feature "galleries" and "portfolios."

Despite these connections to traditional art, the art world has not yet opened its arms to the new digital media. Gallery and museum exhibitions of digital art are still relatively rare, and many critics and even fellow artists have greeted the work of digital artists with hostility. Ours is not the first era in which artists have embraced new media and technologies in the face of resistance from traditionalists in the art world. For example, until the fifteenth century in Italy, oil paint was despised by artists. Renaissance painters then learned that the paint's biggest drawback—its slow drying time—was actually an advantage, allowing them to rework and perfect images in a way that was previously unimaginable.

Nor is the computer technology behind digital media the first time an industrial application has been appropriated for artistic use. The now-popular medium of lithography (see Chapter 6) was first used as a method for printing newspapers. The new pigments embraced by the Expressionists were formulated by German chemists for dying fabrics in the nineteenth century. More recently, in the 1950s, artists began using industrial paint made of plastic polymers and renamed it *acrylic* paint. Cheap and sold by the bucket, it became a favorite material of Abstract Expressionists like Jackson Pollock as their paintings became larger and larger (see Chapter 19).

The invention of photography in the nineteenth century and its reception by the art world parallels best that of the digital media in the twenty-first century. Like the digital media today, photography was greeted with great resistance by the art world of its time. Critics said that photography was merely a mechanical process. Many artists felt threatened by the medium, particularly those whose living depended on portraiture. While it seems surprising now, photography was not generally accepted as a medium for fine art until the mid-twentieth century. Ironically, today many photographers feel obligated to defend the art world from the threat of digital imaging. It is not yet clear how long it will be before the digital media become fully accepted as fine art

media and ultimately take their place in the history of art. What is certain is that the history of artists and computers is just beginning.

The Pioneers of Digital Art

Looking at the earliest computers, it's easy to see why visual artists had no interest in them; they were machines without monitors. They were also huge. For example, the ENIAC developed at the University of Pennsylvania in the 1940s weighed fifty tons and filled a large room. More powerful than any previous computer, it completed calculations that previously took a person forty years in two days. But its vacuum tubes used a great deal of power. Whenever ENIAC was turned on, the lights of a whole neighborhood in Philadelphia dimmed.

In the early 1950s, the first monitors (called *vectorscopes*) were attached to computer systems at the Massachusetts Institute of Technology (MIT) in a project called "Whirlwind." Scientists created a short simulation of a ball (really a circle) bouncing. They also were able to make the huge mainframe play "Jingle Bells." This "impressive" demonstration of the potential of computer graphics and music was shown to a national audience on CBS in 1951.

While other computer scientists found these new visions fascinating, the complexity of early computer graphics experiments made the field unattractive to artists. Typically, it would take days or months of programming before one could begin making a picture. The programs would then run for an hour or more to produce one image. Printing that image took several hours more and required expensive *plotters* (large printers that held rolls of paper, the marks being made by moving pens). Add in the days it would take to make changes in the program to correct an image, and one can easily see why artists did not take computer graphics seriously as a creative medium.

In 1962, a graduate student at MIT, Ivan Sutherland, truly inaugurated computer graphics as an artist's medium. His Ph.D. thesis at MIT was a hardware and software system called *Sketchpad*. It included a small nine-inch monitor and a light pen so Sutherland could draw directly on the screen (8-8). For the first time, an artist could create a work by hand rather than by writing a formula. One of the founding fathers of digital media, Sutherland's system laid the groundwork for much of today's computer graphics. With *Sketchpad*, he could draw simple lines and curves. Each line could be resized and reshaped, as well as moved to a new position. With dials, he could

zoom in or out of his image. *Sketchpad* was a vector system, whereby points are placed and the computer draws the lines between them—the basis of all future vector illustration and three-dimensional software. It even included a way to save images for later viewing.

In 1965, the first exhibition of computer graphics was held at a gallery in Stuttgart, Germany, although it only displayed the work of three mathematicians. Suites of prints were generated by creating variables in the mathematical formulas. Later that year, New York City's Howard Wise Gallery held the first computer graphics exhibition in the United States. It included the work of Michael Noll, an engineer at Bell Labs, who analyzed a drawing by the Dutch artist, Piet Mondrian (see Chapter 19), and devised a program to create a "new" Mondrian. When viewers looked at Noll's image exhibited side by side with the original Mondrian, most preferred the computer's version and were convinced it was the real one (8-9). Neither exhibition was well-received by the art world. One review compared the pictures to "notch patterns on IBM [punch] cards."

But some artists and curators were beginning to see new possibilities. In 1966, the artist Robert Rauschenberg (see Chapter 20) and the electronic engineer Billy Kluver founded EAT (Experiments in Art and Technology). They believed that because technology was now part of life, it should be part of art, too. In 1967, they collaborated with the Museum of Modern Art in New York City on the exhibition *The Machine as Seen at the End of the Mechanical Age*. EAT called on artists to submit artworks that combined art and science. The response was so huge that the exhibition had to spill out to the nearby Brooklyn Museum.

In 1971, well-known artists like Rauschenberg, Andy Warhol, Richard Serra, and Roy Lichtenstein (see Chapter 20) participated in the exhibition *Art and Technology* at the Los Angeles County Museum. Five years in development, twenty-two artists were matched with corporate sponsors who paid for the high costs of computer hardware and software, technicians, and fabrication. Unfortunately, art critics largely ignored the work and focused on the sponsors, labeling the results corporate art.

Because of the still-staggering cost of computing and the complexity of computer programming at the time, "unholy alliances" with industry would be hard to avoid for another decade for any artist interested in exploring computer graphics. However, access to large mainframes and research dollars were available to faculty and graduate students at major universities. In 1968, Ivan Sutherland, who had created



8-8 Timothy Johnson drawing with Sketchpad, 1962.

Sketchpad as a graduate student, became a professor at the University of Utah. One of the great teachers in computer science history, his graduate students became the pioneers of the next generation of computer software, for graphics, games, and general consumers. His students would later found Adobe, Netscape, Silicon Graphics, Atari, and WordPerfect. Among the methods devised by his students were the key breakthroughs in realistic three-dimensional modeling and animation of the 1970s. For example, Ed Catmull, who later founded Pixar, developed the concept of texture mapping, where an image could be wrapped around a wire-frame three-dimensional



8-9 Michael Noll, Computer Composition/Mondrian, 1965.

shape. Others developed *Gouraud shading, Phong shading,* and *bump mapping*. Even today, these methods are essential tools for computer animators and game designers.

Unfortunately, to utilize these wonderful, breakthrough techniques, you had to have access to big mainframe computers, and not too many artists did. Finally, in the 1980s, computers became available that were small enough to fit on a desk, were much more affordable, and you didn't have to be a computer scientist to use them.

For most artists and designers, the computer age began with the arrival of the Apple Macintosh in 1984—the machine that launched graphics-based computing. Known as the first user-friendly computer, the heart of its success was its Graphic User Interface (GUI, pronounced "gooey"). Earlier computers like IBM's first PC from 1981 required typing a series of coded commands with a keyboard to control them. Macintosh users moved a mouse and clicked and dragged on pictures (called icons). The innovative interface had many of the elements that we have since become used to-windows, pull-down menus, and file folders. The Macintosh also came with art software like MacDraw and MacPaint. The graphicsfriendly computer was instantly embraced by artists and designers, beginning a loyalty in the arts community for Apple computers that persists to this day.



8-10 Maggie Taylor, Boy who loves water, 2004.

THE DIGITAL STUDIO

The equipment of digital artists is not like what you would find in the studios of painters and sculptors. Instead of an easel and palette, the digital artist typically has a large desk and computer. The digital artist depends on machinery functioning smoothly to produce his or her visions. Still, the digital studio is a home for creativity and will have many similarities to all artists' spaces. The walls are often covered with clippings and postcards. Bookshelves will be filled not just with software guides, but also with many books on art. The source of the music filling the studio may be MP3 files, but the mood would not seem alien to any traditional artist who visited.

Hardware

Every media has its own unique equipment, and digital media is no different. Obviously, the centerpiece for digital artists is the computer. One would be hard pressed to detect any difference between the computer in a digital studio and one in a business office, but the artist's components will be of much higher quality. The digital arts generally demand the most powerful and fastest components. Fast processors and video cards and lots of memory are needed to be able to manage the complex computations of image or multiple image manipulation. For greater speed, digital artists, especially three-dimensional animators, often use machines with two processors to render their images. Digital artists also use monitors that are much larger and have higher resolution (able to display finer details and millions of colors). Some digital artists actually use two monitors at once—one solely for the image they are working on and the other for the toolbars and menus.

Digital still and video cameras, along with microphones, are common tools used to provide material to be manipulated by digital artists. Scanners are another way artists input imagery into computers. Flatbed scanners are the most common and are used for flat materials like photographs or drawings. Slide scanners are used for transparent media, like slides or photographic negatives. There are even three-dimensional scanners that can digitize objects or sculptures.

Many digital artists who prefer to create their imagery by hand use a graphics or *digitizing tablet*, rather than a mouse. They can draw with a pen or *stylus* directly on the tablet, which can not only sense where lines are being drawn but also the tilt of the pen and how much pressure is being applied. This allows artists to create sweeping, calligraphic lines

that vary in angle and thickness. Some of the latest digitizing tablets are actually flat monitors. This means artists can use the stylus directly on their images and see the images change before their eyes.

The new tablet computers hold great promise as an artist's tool. We are probably nearing the time when artists equipped with tablet computers can go out in the fields and work directly from the land-scape as the French Impressionists with their portable easels did in the nineteenth century (see Chapter 17). Still, the best hardware in the world will not make one a great digital artist, just as a piece of expensive marble and the finest carbide chisel does not make one a great sculptor.

THE DIGITAL MEDIA

Image Editing

Many current digital artists began their careers in the traditional media. Maggie Taylor was trained in photography and photo history. After completing her MFA in Photography, she began a successful career exhibiting still-life images taken with an old four-by-five-inch view camera. In the late 1990s, she bought a computer and a scanner, with the idea that she would use them to retouch her photographs, but she soon realized that there were much more significant possibilities in these new tools. She used the scanner like a camera by placing little objects and backgrounds on it, then combining them with image-editing software.

This new way to collage images to create a montage (see Chapter 7) gives her great flexibility and control. Taylor likes to work in series of pictures, and describes herself as "a collector of all kinds of objects at flea markets." She likes objects "with wear and tear, a past, a story to tell." Because of digital technology, rather than cutting up a precious original, as Hannah Höch did to make her collages in the early 1900s, Taylor has available as many copies as she might need and can adjust each part for size, value, or color. Each element is put on a separate layer, making it easier to add, manipulate, or remove it; there are sometimes as many as forty different layers. A backdrop could be an old photograph or one Taylor has drawn in pastels and scanned, or both. Boy who loves water (8-10) combines vintage photographs, folk elements, and atmospheric backgrounds to create a magical image that could be from an obscure fairy tale. She describes her work as "dream-like worlds inhabited by everyday objects."

Like Maggie Taylor, Stephanie Syjuco produces digital prints that appear to be from the nineteenth century—old botanical illustrations of flora, much admired by collectors. But when one looks closely, rather than delicately painted pressed flowers, we see that the image is a carefully arranged collection of computer peripherals and cords.

Syjuco was born in the Philippines, but grew up in San Francisco, where she lives today. While working at a children's science museum, she was struck with the organic quality of computer cables and plugs. Comparative Morphologies LIII (8-11) was the result of her "thinking about science and technology ... as sources of authority." She photographed each element with her digital camera and then manipulated them on her computer to accentuate their organic qualities, such as combining parts to make a stem. Objects were resized and arranged with care to finish the composition. The antique brown paper is an illusion. It is actually only one layer of the digital image. The layer was made by scanning an old botanical print and then using image-editing software to erase all of the original botanical elements.



8-11 Stephanie Syjuco, *Comparative Morphologies LIII*, 2001. Archival iris inkjet print on Somerset paper, printed by Urban Digital Color. [www.stephaniesyjuco.com]

She has said that as she worked on these prints, the parts were "growing beyond their initial function." The result is lovely and helps transcend the divide between past and present art, as well as the natural world and the digital age in which we live.

Graphic and Type Design

The arrival of personal computers and laser printers in the 1980s created a revolution that shook the foundations of the graphic design world. For decades, designers had gone through a time-consuming process to prepare publications. Type had to be ordered from typesetters, who sent it back on long sheets. Designers then literally cut up these sheets and pasted them onto boards, which (as mentioned earlier) is the source of the phrase "cut and paste" in today's digital software. Any change, even a simple one in the size of a font or a spelling correction, meant a new order to the typesetter, which was costly in time and money.

The revolution began with a computer program called Aldus PageMaker, designed for the newly released Apple Macintosh. This pioneering program allowed a whole new approach to design and layout, which became known as *desktop publishing*. Suddenly, a designer could sit at a desk and manipulate text and graphics. Fonts could be resized or changed instantly, without an emergency call to the typesetter. Most important, the designer could see on the screen the layout as it would be printed—what was called *WYSIWYG* (pronounced "wizy-wig"), or "what you see is what you get."

ABCDEFGHIJKLMNOPQRS TUVWXYZÁÉÍÜabcdefgh ijklmnopqrstuvwxyzàåéî õøü&1234567890(\$£,!!)

8-12 House Industries, Crack House, 1993. Font design.

Another important impact of the digital design revolution was its effect on type design. Because of the new ease of experimenting with typefaces and the simplicity of adding additional typefaces to a computer simply by loading fonts from disks, there was a huge demand for fresh typefaces. There was also new type design software, so that anyone who had a computer could create fonts from scratch.

The result has been thousands of new fonts for all kinds of special uses. By the 1990s, homemade typefaces, known as garage or grunge fonts, were flooding the design world. Custom fonts became part of an underground culture for young designers. The leader of this movement is House Industries. Founded in 1993 by Andy Cruz and Rich Roat, who were then in their twenties, in Wilmington, Delaware, the company has become known for its irreverent attitude but professional approach to type design. The first of their fonts to attract attention was "Crackhouse." Crack House (8-12) was a rough-edged gritty font, unlike the clean, elegant fonts that had previously dominated graphic design. This was followed by a suite of related fonts, called "Bad Neighborhood," with new fonts like "Bad House" and "Poorhouse."

More recently, the designers of House Industries have turned their attention to themes from the past, particularly the styles of the 1950s, 1960s, and 1970s. Describing their style as "Ironic Retro," they have created collections that evoke the styles of swinging Las Vegas, Hawaiian tiki bars, and classic horror films. Instead of simply sending the fonts on a CD, they have designed imaginative packaging, so a 1970s set comes in a boxy van that the team from Scooby-Doo might drive. Their "House-a-Rama" fonts, inspired by the Professional Bowling Tour, comes in a 1960s-style bowling ball bag. Today, House Industries has expanded beyond typography to more complete design services, like package design and illustration, and products like T-shirts, glasses, chairs, pillows, and other specialty items. But the real secret of their success is the time and effort spent in polishing each of their font's designs. Roat has said, "We'd like to think that we work beyond the hollowness of 'retro' through traditional production techniques and exhaustive research of historical genres to produce uniquely authentic materials."

Digital Video

Paul Pfeiffer is an artist who works in digital images and installations, as well as video. He was born in Hawaii, but grew up in the Philippines. As a teenager, the family moved to New Mexico, and he went to a Navajo school where his parents were teachers. He began his art career as a student in San Francisco, studying printmaking.

Pfeiffer is very enthusiastic about the new digital media and has said, "We have great power today to make images that are truly spectacular and to achieve a kind of perfection." In his best-known work, he edits video of sporting events by removing the athletes, allowing the viewers to focus on the context. The viewer's experience of these events is transformed when the centers of attention—the celebrities—are removed and our attention refocuses elsewhere. In "Caryatid," the celebrations at the end of the National Hockey League finals are seen, but without any of the players who carry the victory trophy. The Stanley Cup seems to float around the rink, as the players and crowd express joy around it.

Pfeiffer usually presents his work on small LCD screens that compel you to move close to them and ignore what's around you. In John 3:16 (8-13), the viewer follows the progress of the ball in a professional basketball game. During the thirty-second video loop, the ball is in the center of the screen while it moves magically and fluidly back and forth across the court from the hands of one player to another. The ball rotates, sometimes very gradually. We can see the faces in the crowd when the ball slows, but we never see the players who handle the ball, only their hands. The effect is mesmerizing. The title's reference to the New Testament is meant to connect the eternal life offered spiritually to the "promise of digital images." Pfeiffer says, "they can literally last forever," because they "can always be copied endlessly. In a way, the medium itself represents a kind of promise that almost has spiritual overtones."

Many people make the mistake of thinking that computer art is easy because the computer does all the work. Digital artists know better. Pfeiffer's process of erasing on digital video is time consuming and painstaking. Unlike shooting with blue screens, Pfeiffer works with preexisting footage and has to erase people and then recreate the backgrounds behind them frame-by-frame. For just thirty seconds of *John 3:16*, five thousand frames had to be edited, enlarged, and repositioned. At best, he can complete a minute of video in a month. He enjoys working all day on his work and considers it "like meditation" and "a bit like painting or drawing . . . you leave your every day consciousness of the world and achieve a kind of focus."



8-13 Paul Pfeiffer, *John 3:16*, 2000. Digital video loop, LCD monitor, DVD player, and metal armature, $5\frac{1}{2}$ " \times $6\frac{1}{2}$ " \times 36". Courtesy the artist and The Project, New York.

Digital Animation

The effect of the digital media on animation is one that the public is probably most aware of. Few have benefited more from these changes than the animator, John Lasseter. As a young man interested in animation in the 1970s, he was among the first students at California Institute of the Arts, a school funded by the Disney Studios. While still a student there, he interned with Disney. After graduation in 1979, he was hired by them and put to work on *The Fox and the Hound*. During his time at Disney, Lasseter became enthusiastic about the possibilities of computer animation, but the studio was uninterested. Lasseter took the daring step of quitting an animator's dream job in 1984 to pursue his new interest.

He did not remain unemployed for long. Lasseter was hired by George Lucas for a new computer

animation and special effects division at Lucasfilm. Unfortunately, Lucas soon decided to refocus the division on special effects only (renaming it Industrial Light and Magic) and sold off the computer animation portion. Luckily for Lasseter, the buyer was Steve Jobs, who had founded Apple. Jobs invested millions into the new company, hired the best minds and talents in computer animation technology, and called his company Pixar.

Lasseter's first fully computer-animated film at Pixar was called *Luxo Jr.* (8-14). It tells the story of a child lamp who loves to bounce a ball under the watchful eyes of his parent. Only a few minutes long, it was the first computer-animated film to be nominated for an Academy Award. Lasseter won his first Oscar two years later, for the short film *Tin Toy.*



GLOBAL VIEW

Japanese Anime

nimation from Japan is becoming a cultural force around the globe. Known as *anime* (pronounced "annie-may"); it has a distinct style as well as a wider range of subjects compared to animation in the United States. In Japan, it is not only for children, but enjoyed by all ages.

Visually, anime's distinct style evolved from nineteenth-century drawings by artists like those of Hokusai (see Chapters 2 and 17) called *manga*. Manga means "easy, silly pictures" and were printed sketchbooks that purported to show everyday life in Japan. Although they did show many ordinary scenes like fat men taking a bath, they also included fantastic images, like men and women smoking who have long necks like curling snakes.

In the twentieth century, manga evolved into comic books. More visually sophisticated than their American counterparts, they included close-ups, unusual angles, and imaginative page layouts. In the late 1950s, Tezuka Okama, who was called in Japan "the god of manga," began the *anime* movement when he turned his manga character *Tetsuma Atomu* (Mighty Atom) into an animated cartoon for television. Atomu was a crimefighting boy robot with jets in his feet. When his cartoons finally came to the United States, he was renamed *Astro Boy* (the name change was necessary to avoid reminding Americans about Hiroshima).

Tezuka's drawing style influenced Japanese manga and animation profoundly. It is a style viewers of Pokemon would recognize today. His human characters have big eyes and sweet, rounded faces. Strong emotional reactions are shown by close-ups of faces with mouths wide open and holding a still image.

Today, the most influential anime director is Hayao Miyazaki, the director of *Spirited Away* (8-15), *Princess Mononoke*, and other classic films. His stories are adventures, but not ones where there are battles with swords. In *Spirited Away*, a girl whose family is moving finds herself alone in a mysterious town. There are ghosts,

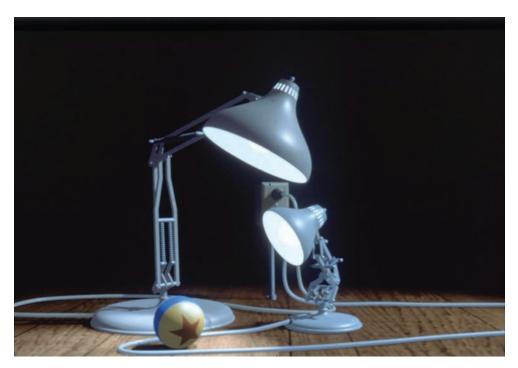
A GLOBAL VIEW

gods, and monsters, and she must try to figure out which ones to trust and what to do in order to save her parents. The fairy-tale atmosphere is enhanced by lovely, subtle colors, beautiful hand-drawn characters, and elaborate, decorative computer-animated backgrounds.

Miyazaki is an extraordinarily meticulous animator. Unlike most directors, he checks every drawing and redraws ones that are not to his satisfaction. He founded Studio Ghibili in Japan to produce high-quality animated films and support other talented Japanese animators. His animation has also influenced directors worldwide. Spirited Away was not only the most successful film in Japanese cinema history, but it also won many awards, including the Oscar for Best Animated Film. The style of recent Disney films have shown anime's influence. John Lasseter, the greatest American animator of our generation (see the Digital Animation section), helped bring Spirited Away to American audiences and describes Miyazaki as one of his heroes. In fact, when the Pixar staff is having trouble with one of their films, Lasseter makes them watch films by Miyazaki.



8-15 Hayao Miyazaki, still from *Spirited Away*, 2001. Animated film.



8-14 John Lasseter, Bill Reeves, Eben Ostby, Sam Leffler, and Don Conway, *Luxo Jr.*, 1986. Frame from film. Copyright 1986 by Pixar. All rights reserved. "Luxo" is a trademark of Jac. Jacobson Industries.

The three-dimensional animation process to create such a film is quite complex. It begins with modeling, where each element is drawn first in *wire-frames*—a kind of digital sculpting where the three-dimensional form looks like it is covered in a web of netting. Colors and textures for each object are chosen. Then lights are positioned on the scene. After all of the modeling and lighting is completed, animators get to work. They decide on the movements of every part of every character and place virtual cameras to track the movements. Finally, the objects, backgrounds, lights, and movements are all *rendered* (the computer generation of each scene that adds all of the planned colors, shading, texture, lighting, and movements to the wireframe forms).

Ironically, as a result of Pixar's early successes, Disney finally became interested in Lasseter's computer animation skills. Pixar and Disney agreed to collaborate on the first full-length and completely computer-animated film. The project took four years to complete, but *Toy Story* became one of the highest-grossing animations in history. An incredibly complex undertaking, it required a room full of computers, stacked like pizza boxes, just to render one frame at a time. Despite all the computing power available, each frame took hours to render.

In the years since, Lasseter has been the creative force at Pixar behind films like *Monsters Inc.*, *Finding Nemo, The Incredibles*, and other great successes. With the recent purchase of Pixar by Disney, Lasseter has now returned to his former employer as one of the leaders of their revitalized animation division. Lasseter would attribute his success, however, not to amazing technology but to his mastery of traditional animation skills. For him, story and an understanding of the fundamentals of animation is what is most important. The technology is just the tool.

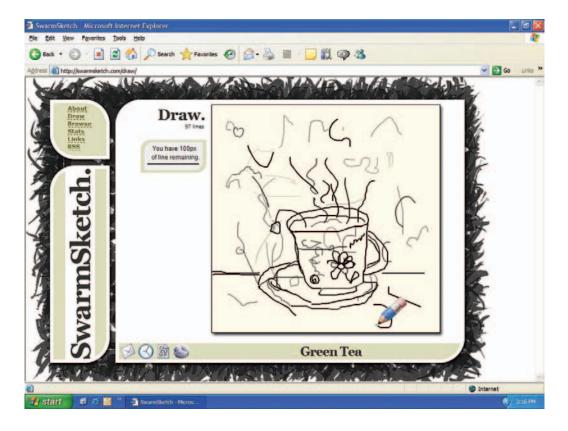
Internet

The World Wide Web not only has provided new ways of distributing and publicizing art, but it also has provided a new way to create it—as a worldwide group project. Collaborating on an artwork is not without precedents in art history. *Prometheus Bound* (see Chapter 3) was painted by the partnership of Pieter Paul Rubens and Frans Snyders. Many successful artists (including Rubens) have had assistants to help them finish their work. The Surrealists (see Chapter 18) made collective drawings in a process they called "The Exquisite Corpse." Each artist would draw a body part without knowing what the

others had done. But generally, these artists were in the same room or at least the same city.

SwarmSketch is a web project by Peter Edmunds begun in 2005 designed to reveal "the collective consciousness" of the world on a weekly basis (8-16). Each week, hundreds of people around the world go to Edmund's website and work on a drawing. The week's theme is selected from a current popular search term from major search engines. Past draw-

ing titles include "World's Ugliest Dog," "Smoking Gun," and "Unclaimed Baggage." Each time visitors come to the site, they can only contribute one line, but they can also vote to lighten or erase many other people's lines. As you vote on a line you can adjust its value, see the change, and also learn what country the contributor was from. While the highest percentage of Swarm artists come from the United States, many others are from Europe and Asia.





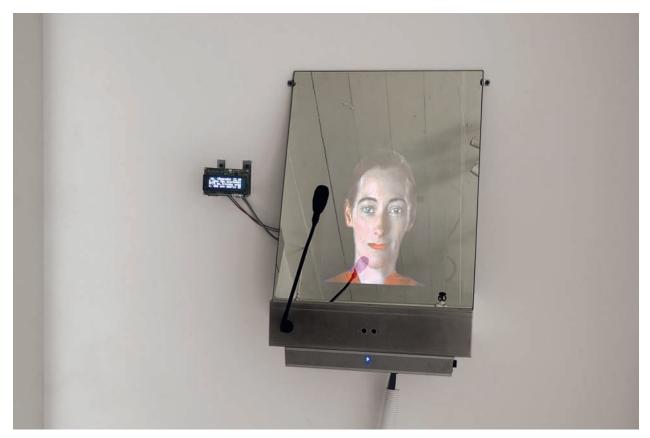
8-16 Peter Edmunds, *Swarm Sketch*, 2005. Interactive website. Peter Edmunds, Unclaimed Baggage, 05/12/2005, online collaborative drawing from swarmsketch.com.

Interactive

Lynn Hershman Leeson has been making interactive art for decades, as well as films, videos, sculptures, photography, performances, and installations. With these diverse art forms, her focus has remained on female identity and how it is conditioned by society. Her most recent work includes several attempts to create a female artificial intelligence robot that can interact either with her environment or viewers. These robots continue her interest in interactivity that began in the late 1970s. In what ultimately became an interactive laserdisc project, viewers could control videos of Lorna with a remote control or a telephone. Lorna was a woman who hadn't left her home in four years and whose only contact with the world was through her television. Several plotlines were possible. Based on audience responses, she could end up shooting the TV set, herself, or even worse (according to Leeson), move to Los Angeles.

The overall form of Synthia from 2000 was modeled on an old-fashioned stock market ticker tape. Under a glass globe was a small screen that displayed a woman. Connected to the actual stock market, the woman reacted to the performance of the market on that day. For example, if the market was doing well, she might dance or go shopping. If it was really hot, she burst into flames. A down market could lead to chain smoking or shopping at a used clothing store. In 2002, Leeson created Agent Ruby 2, who was seen on an LCD screen and was able to react to visitors. She answered questions and remembered information. Her intelligence grew based on her experiences. One visitor even tried to teach her German, but the only way viewers could question her was by typing on a keyboard.

DiNa is a step forward in artificial intelligence (8-17). With the help of a programmer using artificial intelligence and speech recognition software, *DiNa* can learn, express emotions, and carry on a



8-17 Lynn Hershman Leeson, *DiNa*, 2004–2005. Dimensions variable (pictured: 10" × 10" × 10"). Networked artificially intelligent agent with Pulse 3D Veepers, Alicebot, and Natural Voices Software, editon of 3. bitforms gallery, nyc

sensible dialogue with a viewer. Her face is modeled in three-dimensional software and is animated to be synchronized with her speech. Like *Ruby*, her features are based on the actress Tilda Swinton, who has acted in Leeson's films. Because *DiNa* is connected to the Internet, she is aware of contemporary events and can search for information. She even ran for President in 2004 and had a campaign website. Her slogan was "Artificial Intelligence is Better then No Intelligence."

Although interacting with *DiNa* is fun, Leeson believes that the issues she raises are very serious. "Our relationship to computer based virtual life forms that are autonomous and self replicating will shape the fate of our species and seem to me to be a critical issue of our time." Leeson knows that these kinds of life forms are still in the future and that her goals for *DiNa* cannot be completely achieved with current technologies. Like most artists, she has always overreached, but when one follows the progress of her robots, one can see that there will be a time not so far in the future when her goals will be realized.

The Digital Era of art is just getting underway. As this century begins, we can already see that art-

ists have been handed tools that the Futurists at the beginning of the last century would have been thrilled by. There is no artist's medium that is not being affected by the computer age. This chapter provided just a sample of the many ways artists are utilizing the new media.

But the impact does not stop there. These new tools are often inexpensive and available to anyone. Just as, in the early 1900s, Kodak's first cameras put photography in the hands of the general public, today young and old have digital cameras. They can edit images on their computers and send them instantly thousands of miles away. Children use simple paint programs to make pictures, as well as create simple animations and videos. Videogames are causing a shift in consciousness. A generation has grown up moving in imaginary three-dimensional spaces of everincreasing complexity. Online game play has made virtual collaboration ordinary; players can not only take part in video games and converse with other players anywhere in the world, but they can also create their own levels. How all of these elements will affect the history of art and the planet remains to be seen, but we can be sure that they will.

Sculpture

The art of sculpture is believed to be as old as human culture. Carved charms, amulets, and fertility figures such as the *Venus* of *Willendorf* (1-9) were created by Ice-Age tribes described in the first chapter. Most of these magical objects were relatively small and easily carried from place to place by nomadic hunters. At the other end of the scale, some prehistoric civilizations sculpted huge stones that have stood in the same place for centuries. For example, the Colossal Olmec head (9-1) is one of four found at an ancient temple-pyramid plaza in Mexico. How a stone weighing approximately ten tons could have been moved by a people without domesticated animals or the wheel remains a mystery, because the nearest source of this type of rock is more than fifty miles away. Volcanic basalt is an extremely hard stone, yet this boulder was carved only with stone tools, since the Olmec civilization that created it did not use metal tools. The face is thought to be that of a ruler, but might also be the portrait of a god. More than nine feet tall, its large, symmetrical features

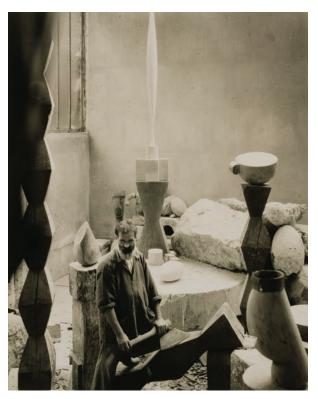
and stern expression seem designed to strike the viewer with fear and awe.

Sculptural decorations and statues were also part of the palaces of the Middle East, the tombs of the ancient Egyptians, and temples in India. Greek sculpture was a glory of the classical world, although little of it has survived to the present day.

Many of the techniques and tools of the sculptor have been used for centuries. When we see Edward Steichen's (see 7-11) photograph of the modern sculptor Constantin Brancusi in his studio wielding a heavy axe and surrounded by rough-hewn stones (9-2), we are reminded of the ancient, even prehistoric, lineage of sculpting. Sculpture has traditionally been divided into two major categories—what is called relief sculpture and freestanding sculpture (sculpture in the round). In the twentieth century, new categories were introduced—kinetic sculpture (art that moves), performance art, installations, and earth art.



9-1 Colossal head, Olmec, La Venta, Mexico, 900–400 BCE. Basalt, 9' 4" high. Museo-Parque La Venta, Villahermosa.



9-2 Edward Steichen, *Constantin Brancusi in His Studio*, 1925. Photogravure from plates by John Goodman and Richard Benson, $10\frac{3}{16}$ " × 8". Private Collection.

RELIEF SCULPTURE

A relief sculpture grows out of a flat, two-dimensional background, and its projection into three-dimensional space is relatively shallow. The back of a relief sculpture is not meant to be seen; the entire design can be understood from a frontal view. Relief sculptures are often used in conjunction with architecture, as wall decorations. For instance, the stone walls of Assyrian palaces were carved with designs that protrude only slightly into three-dimensional space (9-3). The outlines of the figures are sharply cut, rather than modeled, so they appear almost like decorative cookies stuck onto the backing of the wall. The linear quality of these low reliefs—the rhythm and pattern of the lines—is their most striking aesthetic feature. If we look closely, however, we can see sculptural effects in the curve of a cheek or the muscle on a thigh.

Most Assyrian reliefs commemorate the military victories and hunting expeditions of the kings who ruled some twenty-eight hundred years ago in what is now Iraq. Carved in limestone, these sculptured



9-3 Ashurnasirpal II Hunting Lions, (detail) Nimrud, c. 875 BCE. Limestone, approximately 39" high. British Museum, London.

9-4 Plaque showing a king mounted with attendants, Benin, Nigeria. Bronze, 19½" × 16½". The Metropolitan Museum of Art, New York (gift of Nelson A. Rockefeller, 1965).

pictures lined the walls of royal habitations. Words praising the king and his accomplishments were generally carved over the figures.

The plaque showing a king mounted on a horse with attendants (9-4) from the Court of Benin, Nigeria, also decorated a royal palace. It is one of nearly a thousand that covered pillars in the many courtyards and galleries. When they were made in the sixteenth century, Benin was a vast empire in West Africa and was trading with Europe. On the brass plaques, size signifies power (see hierarchical scale, Chapter 3); ornaments identify status. The central warrior chief is in *high relief* (or almost in the round); he seems about to ride out of the plaque. His warriors carry shields held out in high relief to protect him from the sun. His two small attendants in shallow relief are there simply to support the king's hands.



SCULPTURE IN THE ROUND

In contrast to sculptural reliefs, freestanding sculpture inhabits three-dimensional space in the same way that living things do. Sculpture in the round cannot be appreciated from only a single viewpoint but must be circled and explored. As the poet Donald Hall has written, "If there can be one best picture of a sculpture, the sculptor has failed." Apollo and Daphne by the Italian Baroque sculptor Gianlorenzo Bernini (9-5, 9-6) is a powerful example of sculpture in the round. The figures seem not only like living creatures, but also seem to be moving. In the ancient myth on which the statue is based, the god Apollo fell in love with the lovely nymph Daphne. As he was chasing and just about to overtake her, Daphne called out to the Earth goddess to save her from Apollo's unwanted advances. Gaia heard her cries and came to her rescue: the instant Apollo touched her, Daphne was transformed into a laurel tree.

As the viewer moves around the life-sized figures of the young Apollo and the nymph Daphne, the twists and turns of their bodies in space create not only new visual discoveries but changing patterns of positive and negative space in three dimensions. In contrast to relief sculptures, there is no predominant

view. The figures, draperies, and setting flow into each other as you walk around the sculpture. Closer up, Bernini provides the viewer with many exceptional details, too (see 9-20). As was common in late sixteenth-century Italy (see Chapter 15), the statue was intended to be a *tour de force* of artistic skill.

KINETIC SCULPTURE

In the 1930s, while in Paris, the American sculptor Alexander Calder had begun working nonrepresentationally, making organic, simple forms out of metal. Because he wanted to see these forms float and turn in space, Calder invented the kinetic sculpture or mobile (a name given to his work by Marcel Duchamp). The first mobiles used machinery to move the shapes that dangled from wires. Soon, however, Calder came to the happy idea of using the wind to move his dangling shapes, as in the dramatic mobile—twenty-nine by seventy-six feet long—hanging in the National Gallery of Art in Washington (9-7). By using air currents, these works feel absolutely natural, although they are made of totally abstract shapes. Their delicate balance makes each part seem weightless. Because the wind resistance



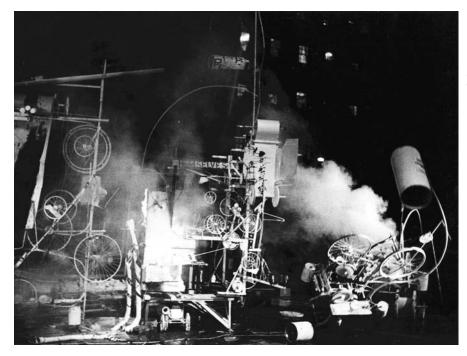
9-5 Gianlorenzo Bernini, *Apollo and Daphne*, 1622–1625. Marble, life-size. Galleria Borghese, Rome.



9-6 Alternate view of figure 9-5.



9-7 Alexander Calder, *Untitled*, 1978. Painted aluminum and tempered steel. 29' 10½" × 76". Gift of the Collectors Committee, Photograph © 2001 Board of Trustees, National Gallery of Art, Washington.



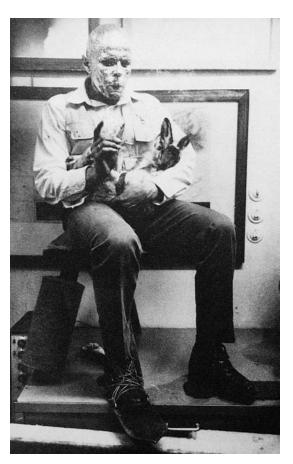
9-8 Jean Tinguely, *Homage to New York*, 1960, just prior to its self-destruction in the garden of The Museum of Modern Art, New York.

and weight of each piece varies, different parts will move at different speeds. Therefore, the relationship of the parts is constantly changing. No photograph can do these moving sculptures justice.

Jean Tinguely's kinetic sculptures of the 1960s were not nearly as pleasant. His infamous *Homage to New York* (9-8) was a mass of junk, including bicycle wheels, fans, many motors, and metal tubes. A comment on modern life and the machine age, it was a machine designed to destroy itself. Turned on at night before private guests (including the governor of New York) in the sculpture garden of the Museum of Modern Art in New York City, the sculpture made horrible noises, smoked, and, after several malfunctions, burned to a heap in a half hour. Besides being a kinetic sculpture, *Homage to New York* could also be described as a staged event and thus included under another new category of sculpture, performance art.

PERFORMANCE ART

Beginning around the 1960s, artists began to challenge the whole concept of art being the production of lasting physical objects. A movement called **performance art** created living sculptural events that were ephemeral, art experiences made for the moment, intended only to last in memory. Few contemporary performance artists have *not* been influenced by the German artist Joseph Beuys. His performances were



9-9 Joseph Beuys, *How to Explain Pictures to a Dead Hare*, 1965. Performance at the Galerie Schmela, Dusseldorf. Photograph © 1986 Walter Vogel.

always an unpredictable kind of gallery experience. In a 1965 performance *How to Explain Pictures to a Dead Hare* (9-9), for example, Beuys entered an exhibition of his drawings and paintings with his head covered in honey and gold leaf. Carrying a dead hare in his arms, he walked from picture to picture and touched the rabbit's paw to each one. Then he sat down in a corner of the gallery and proceeded to discuss the meaning of his pictures with it. He said that he did this "because I do not really like explaining them to people" since "even in death a hare has more sensitivity and instinctive understanding than some men with their stubborn rationality."

Laurie Anderson has been a leading innovator in combining electronics, music, and performance art. Her work is autobiographical and complex. United States Part II (9-10) was developed in performances over six years and gave Anderson a celebrity status that is without precedent in performance art. In front of a huge screen, Anderson played a synthesizer keyboard that controlled her music and voice. The screen's images constantly changed during the eight-hour piece, a fluid stream of a map of the United States, photographs, drawings, and the video game "Space Invaders." Her voice changed constantly, too, gliding between various personae from a clichéd mother to a corporate executive. There are both instrumentals and songs in United States; one song, "0 Superman," contains the chilling lines: "Well,

you don't know me but I know you, and I've got a message to give you. Here come the planes." At that moment, the theater is filled with the roar of aircraft. This message, from a performance of the 1980s, seems almost to foreshadow the terrifying events of 9/11.

After *United States Part II*, Anderson was signed to a recording contract; in fact, "0 Superman" rose to number two on the British pop charts. While most performance art is meant to be seen only once, *United States* was booked for scheduled runs like a play. Theatre critics even began reviewing Anderson's work. Some have said that Anderson has left the arena of fine art and crossed the line into entertainment. However, the goal of performance art has always been to break down the traditional boundaries of art and to confront viewers as directly as possible. Anderson's mesmerizing cross-disciplinary works have reached people who rarely see avantgarde art and has influenced the worlds of popular music, opera, film, and theater.

INSTALLATIONS

One of the newest art forms is the mixed-media **installation** or **environment**, which can be constructed in galleries, museums, or even public spaces. This large-scale art takes over a space and provides a complete and unique artistic experience for anyone



9-10 Laurie Anderson,
Performance of "United States"
1983. Copyright: Laurie Anderson. Photograph:
Perry Hoberman. Courtesy of Sean Kelly Gallery.
New York

who enters. For example, Kenny Scharf was selected in 1985 to create an installation for the Biennial Exhibition at the Whitney Museum in New York City, one of the most important exhibitions of contemporary art. For this project, Scharf chose to decorate the passageway to the restrooms with a combination of painting and sculpture (9-11). He moved into the museum, sleeping overnight on a couch in the women's restroom, and covered the walls in Day-Glo paints (later lit by black-light lamps), mixing cartoon characters like Fred Flintstone with wild patterns. Many objects (which he called "trash") were stuck to the walls and hung from the ceiling, including portable tape players that blasted loud music. The installation included decorating the phone booths at the end of the corridor with paint, glitter, and fake fur, as well as the restrooms themselves. Scharf transformed a minor hallway in a major museum into a Postmodern, raucous fun-house.



9-11 Kenny Scharf, installation view of *Closet, No. 7*, 1985. Mixed media. From the 1985 Biennial Exhibition at the Whitney Museum of American Art, New York, March 13–June 9, 1985. Courtesy of Scharf Studio, photography by Tseng Kwong Chi

EARTHWORKS

Earth Art is an outgrowth and expansion of installation art—art that not only provides an environment but also leaves the gallery and interacts directly with nature. Robert Smithson was the foremost theoretician of Earth Art, where the landscape is reshaped by the artist's vision. Smithson was one of a group of artists who had become disillusioned with the world of contemporary art, which he felt had become proudly isolated and cut off from ordinary people's concerns. He wrote:

Museums, like asylums and jails, have wards and cells . . . neutral rooms called 'galleries.' A work of art when placed in a gallery loses its charge and becomes a portable object or surface disengaged from the outside world. . . . Once the work of art is neutralized, ineffective, abstracted, safe and politically lobotomized, it is ready to be consumed by society.

Smithson's answer to this problem was to create a new kind of art. His Spiral Jetty (9-12), constructed in 1970, remains the most famous and archetypal earthwork. Attracted to the Great Salt Lake in Utah because of its pink coloration (caused by microorganisms that live in the salt flats), Smithson was looking for a site along the shore when he had a vision while walking in the hot sun. He imagined a "rotary that enclosed itself in an immense roundness."Thus was born the idea of an enormous spiral ramp extending out into the lake. With the financial help of a gallery owner, and a crew of men, a tractor, and dump trucks, Smithson built his Spiral Jetty. It was fifteen feet wide and fifteen hundred feet long. Like most earthworks, it is horizontal in character and constructed from materials found at the site—in this case, basalt, limestone, and earth.

Smithson was pleased to learn that salt crystals also have a spiral shape, so as he says, "The *Spiral Jetty* could be considered one layer within the spiraling crystal lattice magnified trillions of times." While that concept is intellectually satisfying, it was the colossal scale of *Spiral Jetty* that assured the sculpture's impact. Reminiscent of ancient monuments, Earth Art is admirable as a feat of engineering and art that is impossible to ignore. Unlike most art, no earthwork has to compete with the storm of images in ordinary life; most are placed in isolated sites, so they can be contemplated without distraction. Part of Earth Art's beauty is that its visual impact is constantly changed by nature. One's impression will be completely different depending on the light, weather,



9-12 Robert Smithson, *Spiral Jetty*, April 1970. Black rocks, salt crystal, earth, red water, algae, 1500' long, 15' wide. Great Salt Lake, Utah. Art © Estate of Robert Smithson/Licensed by VAGA, New York, NY

and seasons. Earthworks are also rarely permanent. Nature ultimately recycles the materials.

For instance, because the waters of the Great Salt Lake rose after 1970, for many years the *Spiral Jetty* was only visible in photographs and film. Recently, however, the water level has fallen, and Smithson's earth sculpture has once more, unexpectedly, emerged. Tragically, Smithson did not have the opportunity to see the *Spiral Jetty* sink and rise, or to fulfill his many plans for further projects. In 1973, the thirty-five-year-old artist was killed in a plane crash while scouting a possible site in Texas.

His widow, Nancy Holt, is an important Earth Artist in her own right. Like many contemporary Earth Artists, Holt is interested in restoring humanity's connection to nature and the heavens. Her *Sun Tunnels* (9-13) are four concrete tubes, each eightteen feet long and about nine feet in diameter. They were positioned carefully in the Great Salt Lake Desert in Utah so visitors inside them can see sunrises and sunsets at both summer and winter solstice. The human-made tubes provide both shelter from the desert's hot sun and beautiful views of the desert landscape through their circular openings. From inside, small discs of light in the shape of constellations can be seen. These are the result of holes cut in the concrete tubes. *Sun Tunnels*, Holt says, are meant



9-13 Nancy Holt, *Sun Tunnels*, 1973–1976. Four concrete pipes, each 18' long, 9 ½" diameter; "X" configuration, 86' from end to end across axis. The tunnels are aligned with the sun on the horizon (sunrises and sunsets) on the solstices. Sunset at the summer solstice viewed through one of the tunnels. Near Lucin, Utah, in the Great Salt Lake Desert. Art © Nancy Holt/Licensed by VAGA, New York, NY

GLOBAL VIEW

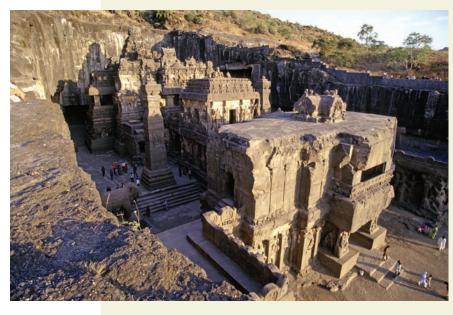
Eighth-Century Earth Artists

arth Art is not just a contemporary phenomenon. In India, long before modern machinery was developed, temples were carved directly out of mountainsides, creating both human-made caves and freestanding monuments. This is the subtractive method of sculpture taken to the ultimate degree. Southern India is famous for caves hollowed out of rock. By placing their temples in the earth itself, the Indians established a deep bond with nature, sheltering in the womb-like shape of the human-made cave. Yet these caves were not the most impressive of Indian sculptural accomplishments.

Majestic and elaborate, both sculptural and architectural, the Kailasa Temple at Ellora (9-14) was carved top-down from solid rock 120 feet high. The courtyard is almost the length of a football field, 300 feet long and more than 150 feet wide. Within that space the temple includes a series of elements, including sixty-foothigh columns, and a tower of ninety-six feet, as well as a gateway, porches, and many shrines. Each of these structures is decorated with detailed sculptures that would once have been covered with white plaster and painted in bright colors, like Greek and Roman sculpture.

Built in the 700s by Hindu ruler Krishna II, the Kailasa Temple reportedly impressed even the man for whom it was made so much that he said, "How is it possible that I have built this other than by magic?" (Of course, the labor was done by thousands of workers and probably took more than a hundred years.)

As in other Hindu temples, there is a strong contrast between the bright light outside and the cooler light within, because the mountain from which the temple was carved casts deep shadows across the sculptured buildings. The design of the central shrine echoes the shape of Mount Kialasa, one of the peaks of the Himalayan mountains, believed to be the home of the Hindu God Shiva. The fusing of nature with sculpture and architecture makes this religious city-of-rock unique.



9-14 Kailasa Temple, eighth century, Ellora, India, 96' high.

to "focus our perception" and to get a firmer sense of our own relation with the universe.

Many contemporary Earth Artists have actually carved the earth with bulldozers, treating it as a material for enormous sculptural works. Others have built up huge constructions of stone. Earthworks utilize the subtractive and additive methods of sculpture on the grandest scale.

SCULPTURAL METHODS

To discuss the sculptural media, it is most important to understand sculptural methods. These can be broken down into two basic categories: **additive** and **subtractive**. In additive methods, the sculpture is *built up*, such as modeling a flexible material like clay or plaster or building an installation; in subtractive methods, it is *carved out* of hard materials such as wood or stone.

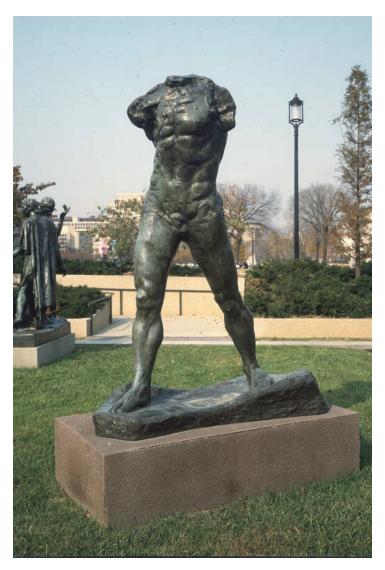
Modeling

Most of our childhood experience in making sculpture was with modeling statuettes out of the familiar material of clay (or clay substitutes, such as Play-Doh). Sculptors may also use clay to make sculpture, but they often build the clay form around a metal skeleton, or *armature*, for added strength.

Modeling materials, like clay or wax, sometimes perform the same function for sculptors that drawing media do for painters, enabling them to sketch out their ideas quickly in three dimensions. Such a model is called a maquette. Auguste Rodin's Walking Man (9-15) was originally made in clay as a study for a figure of John the Baptist. In its textured surface, we can see the marks of the sculptor's strong hands modeling clay, pushing in below the ribs and adding a clump to form a muscle. Although they are a crucial stage in the design process, few clay studies survive. Left alone, clay will dry and become brittle; any contact with water will cause it to disintegrate. However, if baked or fired in a kiln, clay hardens to a rich red-earth tone and is called terra-cotta. For his Walking Man, Rodin utilized another, more permanent, way of preserving clay studies called **casting**.

Casting

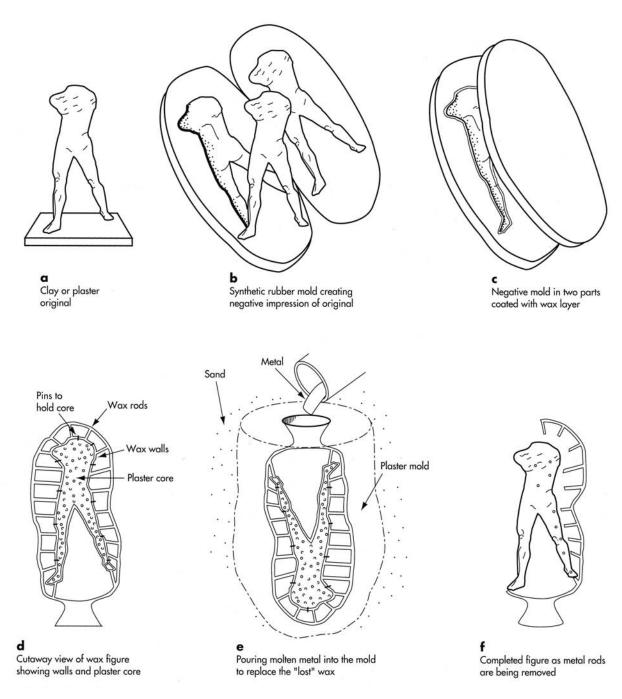
The centuries-old method of casting is an important, if complicated, sculptural process that allows the sculptor to make a lasting copy of his work or to create multiple copies of one design. Since ancient



9-15 Auguste Rodin, *Walking Man*, 1900–1905 (cast 1962). Bronze, $84\frac{1}{2}$ " \times $61\frac{5}{6}$ " \times $28\frac{7}{6}$ ". Hirshhorn Museum and Sculpture Garden, Smithsonian Institution (gift of Joseph H. Hirshhorn, 1966).

times, the most common material for casting has been the metal bronze, although other metals or plaster may be used.

Casting sculpture requires a series of steps in contrast to the more direct method of modeling. Most cast metal sculptures are made to be hollow, by what is called the **lost wax method** of casting (9-16). Once the original sculpture is created, a plaster or rubber mold is then made that can fit snugly around it and retain all the details of its shape and surface texture. After it is made, the original sculpture is removed from the mold, and a thin layer of wax is applied inside the mold, of exactly the thickness desired



9-16 Lost Wax Method.

for the final metal sculpture. This layer of wax is, in essence, a hollow wax model of the original sculpture. The inside of the wax model is next filled with a material like plaster, while an outer covering of plaster is placed around the wax maquette's exterior. The whole plaster/wax arrangement is then baked in a kiln. During the baking, the plaster becomes hard

and the wax melts out. That is why this is referred to as the "lost wax" method of casting. The hollow area that had contained wax is now open to hold the molten bronze, which is poured in and allowed to dry. When the bronze is hard and cool, the mold is broken off. A hollow metal version of the original sculpture can finally be seen.

Wood Carving

If our first experience in creating sculpture was with an additive technique such as modeling, many of us have also experimented with primitive forms of the subtractive technique of carving—as in carving a shape out of a bar of soap or learning to whittle. If so, we discovered the difficulty of trying to shape materials by this method. In carving, as in preparing a woodcut, the background—the negative space—is removed or peeled away, allowing the form to emerge. The tools used usually mirror the woodcutting tools of one's society and include saws, mallets, and chisels. Once the wood has been shaped, abrasives such as sandpaper can be used to finish and polish the surface.

Wood carving is the most important sculptural art of Africa. African carvings range from highly polished to rough-cut pieces; some depend on the natural beauty of the wood, some are painted, and some are decorated with shells, feathers, and beads. Most

African sculpture in wood is carved from a single piece of a tree, chosen while it is still living, so the shape of the sculpture is limited by the shape of the trunk. The vertical, cylindrical shape of the original tree is then reflected in the outlines of the final work. This can easily be seen in the West African figures of a *Mother and Child* (9-17) and *Man with a Lance* (9-18). The ideal woman is mature, her full breasts suggesting that she has already born and nursed many children, including the baby on her lap.

In contrast, the ideal man exhibits the warrior's attributes of strength and prowess in hunting. Three to four feet high, both figures radiate a dignified presence. When used in the initiation ceremonies and fertility rituals for which they were made, however, they would have been oiled, then decorated in bright beads and cloth. Just as Greek and Roman statues were more colorful than we realize (see 2–17), so African sculpture was not as austere when used in its original context, as with the African mask illustrated in the first chapter (see 1–11). It is



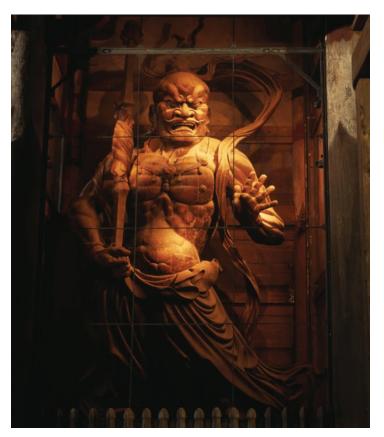
9-17 *Mother and Child,* fifteenth to twentieth centuries, Mali; Bamana peoples. Wood, 48 %" high. The Metropolitan Museum of Art, The Michael C. Rockefeller Memorial Collection, Bequest of Nelson A. Rockefeller, 1979.



9-18 Seated Male with a Lance, fifteenth to twentieth centuries, Mali; Bamana peoples. Wood, 35 3%". The Metropolitan Museum of Art, Gift of the Kronos Collections, in honor of Michael Lerner, 1983.

extremely difficult to date African wooden sculptures; experts estimate that these figures may have been carved anytime between the fifteenth and the twentieth centuries by artists of the Bamana people (from present-day Mali).

Unlike African sculptors who carve from living trees, most sculptors do not usually limit themselves in this way and may join several pieces of wood together to create the effect they want, as in the Kongorikishi, a guardian figure that stands at the entrance of a Buddhist temple in Nara, Japan (9-19). It almost bursts into the space it inhabits; one of a pair, it was meant to drive away evil spirits by its fierceness. This dramatic "Guardian King" stands 26-1/2 feet tall and was made in 1203 by Unkei, the most famous Japanese sculptor of his age, with the help of many assistants. The guardian's furious expression and violent pose seem threatening to us but were reassuring to the worshippers who entered the Buddhist temple he protected. It is as if the Buddhist artist attempted to capture the frightening, demonic forces in the universe and turn them to a positive end.



9-19 Unkei, Kongorikishi (guardian figure), 1203. Wood, 26′ 6″ high. Todaiji Temple, Nara, Japan.

Stone Carving

The most famous sculptures in the Western tradition, like Michelangelo's David (14-6) or the Venus de Milo (12-18), are examples of master carving in stone. Sculptors working on stone use metal tools of three types: the point, the claw, and the chisel. The point is used to cut into the stone block, the claw to continue shaping the form, and the chisel to add detail and finish to the stone surface. Few artists have equaled the skill of the Italian Baroque sculptor Gianlorenzo Bernini. He had the ability not only to unlock complex figural groups from huge blocks of stone but also to finish the stone surface so beautifully that the illusion of texture, such as skin or hair, is created. In his Apollo and Daphne (see 9-5, 9-6), Bernini captures the miraculous moment when Daphne is transformed from a young woman into a tree. Although Apollo's hand grasps her side, he is soon to be disappointed. Daphne's toes are taking root; her fingers are sprouting branches and leaves (9-20). The fine details of this statue are miraculous, too. Marble is very brittle at this scale; one slip of a chisel and a branch would be lost. Notice how the smooth perfection of Bernini's carving contrasts with Rodin's more robust modeling. In choosing this subject for his work, Bernini is deliberately demonstrating his own godlike power to transform marble into flesh, bark, and hair—just as the Goddess Gaia changed Daphne into a tree.



9-20 Detail of Gianlorenzo Bernini, *Apollo and Daphne*, 1622–1625. Marble, life-size. Galleria Borghese, Rome.

MODERN SCULPTURAL METHODS: CONSTRUCTING AND ASSEMBLING

Like modern painters, modern sculptors have explored new media and techniques, some of which have been borrowed from industrial technology. Sculptor David Smith used methods of welding and soldering he learned while working as a young man in an automobile factory to build large stainless-steel structures where simple geometric forms are balanced against each other. The strength of weldedsteel connections allowed Smith to use forms of enormous weight in an almost light-handed way. The steel rectangles, cylinders, and bars are arranged so the open areas between them become part of the design. Smith felt strongly that his work should be seen outside, in bright sunlight. He often added color by painting or texture by burnishing the surface of his finished composition, as with the swirling silvery lines that glint from the surface of Cubi XII (9-21), one of a series of twenty-eight similar sculptures made of hollow stainless-steel blocks.

Like Smith's sculpture, Louise Nevelson's work is geometric and carefully constructed, but instead of being built from steel, her constructions are assembled from found wooden objects—scraps of wood with nail holes, pieces of furniture, anything that struck her fancy. Unlike Smith, Nevelson was never interested in the craft of sculpting: "I wanted the form, but I didn't care for the carving. I wanted something more immediate because my creativity was faster."

Trained in modern dance, Nevelson knew that she wanted to be an artist but spent decades searching for the form her artistic expression would take. In the 1950s (when she was already in her fifties), a cardboard box gave her the idea of arranging her wooden shapes within a box-frame. Soon she began to stack her boxes together to build larger sculptures, painting them a single color (usually black, white, or gold) in order to unify the whole. Later she created sculptural installations with her sculptures lining the walls of a gallery. Her method of working was intuitive; she was building wooden collages in three dimensions, and she would try different arrangements until she was satisfied with the final composition. Note the wonderful variety of shapes within Sky Cathedral (9-22), and the precision with which Nevelson achieved a harmonious balance between these diverse visual elements. Here, a coat of black



9-21 David Smith, *Cubi XII*, April 7, 1963. Stainless steel, 1095/8" × 491/4" × 321/4". Gift of the Joseph H. Hirshorn Foundation, 1972, Hirshhorn Museum and Sculpture Garden. Art © Estate of David Smith/Licensed by VAGA, New York, NY



9-22 Louise Nevelson, *Sky Cathedral*, 1958. Wood, painted black, 11' $3\frac{1}{2}$ " \times 10' $1\frac{1}{4}$ " \times 18". Gift of Mr. and Mrs. Ben Mildwoff. The Museum of Modern Art, New York, NY.



9-23 Tim Noble and Sue Webster, *Kiss of Death*, 2003. Taxidermic animals (carrion crows, jackdaws, rooks, minks, and brown rats), various bones, light projector, and metal stand; overall: 70%" × 31½" × 19½6". Solomon R. Guggenheim Museum, New York. Purchased by exchange, with funds contributed by Dakis Joannou and with a special International Director's Council fund in honor of Dakis Joannou, 2003. Accession #2003.79. Photograph by David Heald ©The Solomon R. Guggenheim Foundation, New York

Mixed Media

As discussed in Chapter 5, mixed media, not surprisingly, refers to art that combines more than one of the media. It is most often used in reference to art that combines both two- and three-dimensional media. Kiss of Death is an unconventional mixed-media project created by the British team Tim Noble and Sue Webster. The sculptors shaped two constructions out of taxidermic birds and rodents: carrion crows, jackdaws, rooks, minks, and rats, combined with bones. These rather gruesome—though strangely fascinating—assemblages were set on poles, then lighted so that they cast silhouette portraits of the artists. The shadow portrait of Noble seems to show a crow pecking out one of his eyes. The entire effect is rather bizarre, horrible, yet humorous.

Tony Oursler's art combines sculpture, video projection, and installation. The sculpture *Woo* (9-24) from 2003 is a simple biomorphic shape made of painted white fiberglass, but it comes to life when a disturbing

paint pulls everything together. The use of black also enhanced Nevelson's lighting; she compared herself to "an architect that's building through shadow and light and dark," creating a mysterious new world.

CONTEMPORARY APPROACHES

We have seen in this chapter that sculpture is a dynamic field, retaining methods used in the Ice Age but also developing new media and approaches. It is not hard to be swept up in the excitement over the possibilities for contemporary artists. Unexpected materials abound as artists mix media, blur the line between freestanding sculpture and earth art, art and craft, sculpture and architecture. Some works, like Kiss of Death (9-23), even combine elements of two-and three-dimensional media.



9-24 Tony Oursler, *Woo*, 2003. Fiberglass sculpture, Sony VPL CS5 projector, DVD, DVD player, $33'' \times 35'' \times 16''$. Courtesy of the Artist and Metro Pictures.

video of bulbous eyes and a mouth in constant motion is projected onto the form. The result is a strange combination of the familiar and the alien. The face mutters, sometimes seductively. When Oursler first exhibited these sculptures, he set up a room full of creatures varying in form, color, and human characteristics. One was clownlike, one wept constantly, while another had four eyes. Each was named like a character in a science fiction novel—Cyc, Sug, and Coo. Their eyes seemed to be seeking out the visitors. One said, "dreamy, dreamy, come here." Although these forms are three-dimensional, their combination with two-dimensional video images and sound brings them to life.

Contemporary artists are also exploring the boundaries between installation and Earth Art, using natural materials to build site-specific pieces that last only for a limited time. Patrick Dougherty is a master of this approach. He designs a unique construction for each site, using natural, local materials such as tree saplings and sticks. For his *A Cappella* (9-25), built at the Montalvo Arts Center in California, Dougherty created a "private sanctuary":

I could see a baroque folly in the wild wood made from branches and serving as a kind of forest confessional where the lore of trees might unfold. It could be an elegantly domed nest with an arched doorway that beckoned to morning walkers.

In fact, viewers are welcome to enter Dougherty's constructions, passing in and out of the sculpted space, truly experiencing both the inside and outside of this magical sculpture in the round. Depending on where one stands, one's experience of both the space and the texture of the walls is ever-changing. In some ways, his works are more like architecture, while their temporary life span and natural materials and settings tie them to installations and Earth Art. Once built, they are meant to last only a few seasons until they collapse, disintegrate, and ultimately disappear back into the earth (though many, like this one, are eventually dismantled). Dougherty was delighted by the reaction to his "pantheistic hideaway," as he heard comments like: "Honey, we could live here. No, honestly, we could."

As we have seen with each of the media explored so far, contemporary approaches have led to a blurring of the lines between all of the media, much like the current blurring of the lines between journalism, history, and fiction in literature; documentary and fantasy in film; or reality and performance on television. In the next chapter we will explore the ways in which architecture is a distinct three-dimensional medium, and again how contemporary architects are breaking through barriers to create innovative and exciting art forms.



9-25 Patrick Dougherty, *A Cappella*, 2003–2005. Willow and bay laurel saplings, $35' \times 25' \times 25'$. Photo: Rod Johnson.

THE ART OF ARCHITECTURE

rchitecture has been called both the greatest and the least of the arts. The architect Walter Gropius called it "the most public of arts." Because important buildings often incorporate sculpture, paintings, murals, frescos, or mosaics, as well as decorative objects, architecture is also known as the "Queen of the Arts," uniting and ruling over a kingdom of different media. Architecture is also simply the largest art form, with pyramids, fortresses, and skyscrapers rivaling the drama of mountains and other natural wonders. A city like New York, Tokyo, Paris, or Rome—a collection of structures designed and built by humans—is as much a "wonder of the world" as the Grand Canyon.

Yet architecture is sometimes considered less "pure" than the arts of painting and sculpture because, like the decorative arts and design, it is meant to be *useful*. We do not put buildings or bridges on pedestals or hang them on gallery walls; we live in them, we move through them, and often we do not see them as art at all. But architecture is the most omnipresent form of art. Because it is experienced by nearly everyone on our planet, archi-

tecture can be said to be a universal art form. Instead of needing to search it out, all we need to do is open our eyes, because architecture of some kind surrounds us wherever we live.

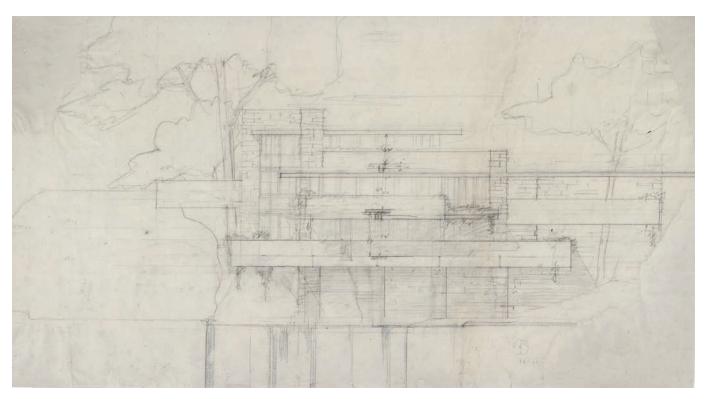
Like sculpture, architecture is a three-dimensional art form; it cannot be comprehended in a single glance or understood by standing in only one spot. Yet architecture seems to exist in more than three dimensions. Because most structures are designed to have both an outside and an inside, to really appreciate a work of architecture, we must walk not only around it but also *through* it. As we relate interior to exterior views in our minds, structures exist in memory as well as space and therefore acquire the fourth dimension of *time*.

The Architect as Artist and Engineer: Planning

The architect must be a cross between a pure artist and an engineer, because a building is not meant only to be seen—it must be functional. Buildings have to match the purpose for which they are constructed. A train station must funnel thousands of people in and



10-1 Frank Lloyd Wright, Kaufman House (Fallingwater), Bear Run, Pennsylvania, 1936–1939. Preliminary study of the floor plans; different levels are drawn in different colors.



10-2 Frank Lloyd Wright, Kaufman House (Fallingwater), Bear Run, Pennsylvania, 1936–1939. Preliminary sketch of the south elevation.

out; a home should be comfortable and hospitable. Floors must support each other; walls should not fall in or out. Skyscrapers should be able to stand in high winds and even earthquakes. In modern buildings, the architect must also plan for services such as heating, cooling, electricity, and air circulation. Besides aesthetics and engineering, there is also a business side to architecture. As in all commissioned art, the architect must consider the needs of the patron and the cost of materials in any design decision.

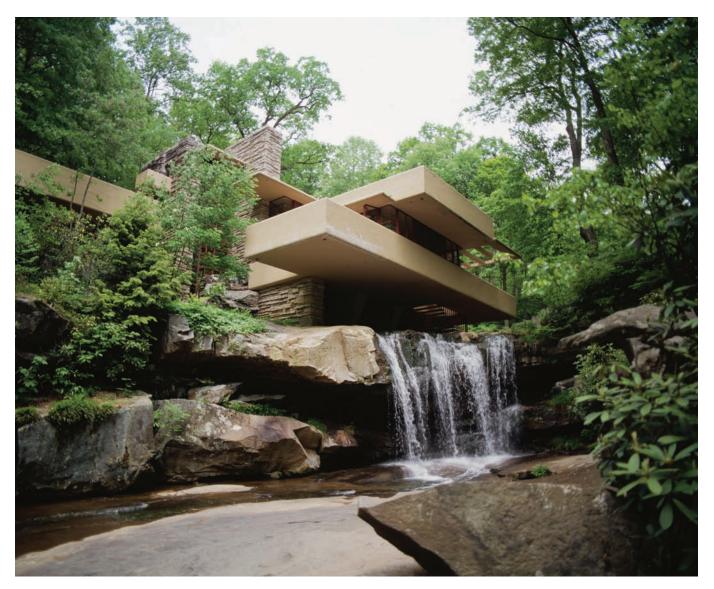
As part of their design process, architects make drawings and models. Some architectural drawings, like Frank Lloyd Wright's, are as beautiful as the final buildings. In 1936, the great American architect made a preliminary visit to a site for a client's new home in the woods of Bear Run, Pennsylvania. After seeing a mountain stream with a waterfall, he came up with the inspired idea of placing the house over the cliff and letting the water pass underneath it. He made floor plans or flat views from above (10-1); elevations or views from the sides (10-2); and perspectives, views that give a three-dimensional impression of the new building in its setting (10-3). These were shown to the client and, with minor modifications, became a modern masterpiece, the Kaufman House



10-3 Frank Lloyd Wright, Kaufman House (Fallingwater), Bear Run, Pennsylvania, 1936–1939. Presentation drawing.

(Fallingwater). By comparing the drawings to a photograph of the finished building (10-4), you can see how close it is to Wright's original conception.

Over the years, however, Fallingwater has developed structural problems. Completed in 1939, it was donated by the Kaufman family to a conservancy, and opened to the public in 1964. Its brilliant design is famous throughout the world, and in



10-4 Frank Lloyd Wright, Kaufman House (Fallingwater), Bear Run, Pennsylvania, 1936–1939.

1991, the American Institute of Architects voted it the "best all-time work of American architecture." But because of fears that it would collapse, the structure is now resting on temporary steel supports. It appears that Wright should have reinforced his concrete slabs with steel rods, but refused to do so. Since the late 1990s, the conservancy has been working to stabilize—and then restore—the structure.

Harmony of Exterior and Interior Design

Unlike other art forms, architecture has both an outside and an inside to be experienced, and the design of both aspects should be in harmony. Such har-

mony can be seen in the façade (the outward face of a building) and interior of the majestic *Dome of the Rock* (10-5) in Jerusalem. This early mosque was built in the seventh century—only a little more than fifty years after the death of the Prophet Muhammad—to commemorate the victory of Islam in capturing Jerusalem from the Byzantine Empire (see Chapter 13 for the history of Islam). The setting is the Temple Mount, a sacred space to three religions. It is believed to be the location where God tested Abraham by asking for the sacrifice of his son Isaac (Judaism), as well as the place from which Muhammad was taken to view both heaven and hell (Islam). The Temple Mount is also located next to the shrine of the Holy Sepulcher, where Jesus was thought to



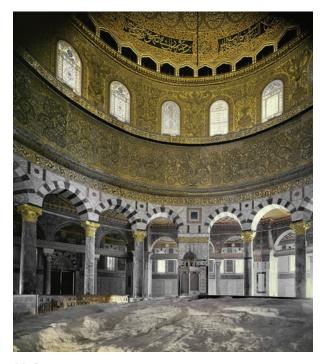
10-5 Dome of the Rock, Jerusalem, 687–692.

have been buried (Christianity). Because it is set on a hill, the *Dome* is visible throughout the city.

The octagonal shape of the mosque was probably inspired by early Christian sites in Jerusalem, similar to St. Vitale in Ravenna (see Chapter 13), but here the wooden dome is much larger and more imposing than Roman and Byzantine domes. The combination of white and turquoise tiles and gold sparkles in the Middle Eastern sun, and is typical of many Islamic shrines. Inside the Dome of the Rock (10-6), the original mosaics (those on the outside were later replaced by tiles) glow with a golden light and impress us with their elaborate patterns of vines. Because the early Moslem religion rejected any attempt at realistic images as idolatrous, artists created decorative patterns to enrich the space that Christian houses of worship would fill with bible stories. Both inside and outside, the lowest level of the mosque is made of beautiful marble pillars (taken from older Roman monuments), the upper levels with bands of mosaic or tile designs. At the center of the interior space is the sacred rock from which Muhammad rose to heaven, encircled by a low decorative wall.

Harmony with Natural Setting

The natural setting of each building also has an effect on its appearance and often influences the way it is designed. As in Wright's Fallingwater, to plan a successful building, an architect must consider local cli-



10-6 Interior, Dome of the Rock, Jerusalem.

mate, available building materials, the building site, and its surroundings. The architect must also consider how to orient a building to take advantage of natural light, attractive views, and prevailing wind patterns. In certain climates, the design of exterior spaces such as patios, courtyards, and **arcades** (covered walkways) can be just as important as that of the

buildings. A beautiful example of the power of these spaces is the fourteenth-century *Court of the Lions* in the Alhambra palace in Spain (**10-7**). While light pours into the center of the king's private court-yard, the covered walkways provide both cool shelter from the hot sun of Spain and a glorious visual spectacle of pattern and rhythm through the harmony between the latticed light and the decoration of the columns and ceilings.

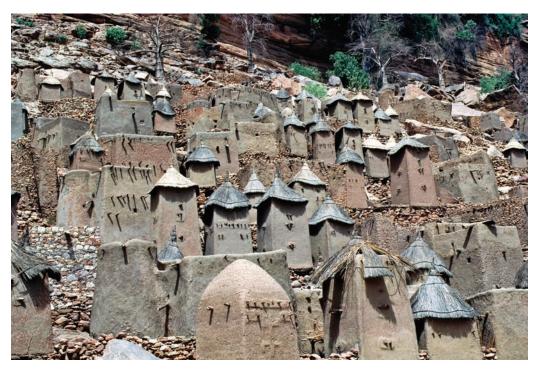


10-7 Court of the Lions, Alhambra, Granada, Spain, 1354–1391.

Art To Be Lived In

Architecture is different from the other arts because it is lived in. Although some people might think of painting or printmaking as a luxury, pleasant but peripheral to our struggle for existence, a shelter is considered one of the necessities of life. Like a womb, architecture protects and encloses us from the hostile forces of the outer world.

Early humans found shelter in caves, made simple tents from animal hides, or built huts from locally available materials like mud, sticks, grass, bamboo, and the bones of large animals. Even today some people live in traditional, handmade dwellings. Such indigenous shelters are rarely given the name of architecture, although they often reflect a sensitivity to the artistic principles of proportion, rhythm, and harmony. These types of buildings might be called "primitive," but they are often ideally suited to the climate and materials of a particular location. Developed over centuries, what has been called nonpedigreed architecture is the result of communal efforts. That result can be both practical and aesthetically satisfying, as can be seen in the rounded and symmetrical forms of a traditional Dogon village in Africa (10-8), as well as the pleasing geometric repetition of Pueblo villages in the American Southwest (10-17).



10-8 Dogon village.

Another name for the architecture of ordinary living is *vernacular* architecture, a term that refers to buildings built in a traditional, local style, without the assistance of a professional architect. There are as many styles of vernacular architecture as there are cultures in the world. In the United States, many regions have their own vernacular styles of housing, such as the log cabins of the American frontier, the Spanish-style haciendas of California, or the New England saltbox homes known as Cape Cods.

Homesteaders on the prairies built their dwellings from sod, or blocks of earth, while the architecture of Native Americans ranged from longhouses to tepees to cliff dwellings.

Around the world, styles of vernacular architecture vary dramatically, as even today humans live in tents, homes on stilts, houseboats, and igloos, as well as simple houses of wood, stone, and clay, all decorated in the local style. From ranch houses to Victorian cottages, most of the architecture we live in is vernacular.

GLOBAL VIEW

The Wonders of the World

he concept of the "Wonders of the World" began in the ancient world. These seven wonders included the Great Pyramid of Giza in Egypt; the Hanging Gardens of Babylon; the Statue of Zeus at Olympia in Greece; the Temple of Artemis at Ephesus, Turkey; the Mausoleum (or tomb of King Maussollos) at Halicarnassus, Persia; The Colossus of Rhodes (a huge statue that spanned the harbor of Rhodes, in Greece); and the Lighthouse of Alexandria in Egypt. Only one—the Great Pyramid—still exists.

Contemporary scholars point out that all of these ancient wonders were from a very small area of the world—from the Eastern Mediterranean to present-day Iran. Equally spectacular wonders that Europeans had no knowledge of, such as the Great Wall of China, never made the list.

Today, a similar but worldwide list of wonders has been compiled by the United Nations Educational, Scientific, and Cultural Organization (UNESCO). Currently, there are more than eight hundred sites on their World Heritage list, more than six hundred of which are cultural sites. Not only does the United Nations select and

identify these sites, but UNESCO works to target areas in danger and undertake safeguarding and restoration efforts. According to their philosophy, World Heritage sites are "irreplaceable sources of life and inspiration" that truly "belong to all the peoples of the world, irrespective of the territory on which they are located." That is, these cultural treasures are the heritage of all humankind, transcending political boundaries.

Many cultural World Heritage sites, like the original list of wonders, include monuments of architectural importance. At Borobudur on Java, in present-day Indonesia (10-9), a safeguarding campaign begun



10-9 Borobudur, Java, Indonesia, c. 800.

A GLOBAL VIEW

in 1972 had completed restoration by 1983. Estimated to have been constructed around 800 AD, Borobudur is a Buddhist site, about four hundred feet long on each side and almost one hundred feet tall, including hundreds of life-size statues of the Buddha and more than a thousand relief sculptures. Built on top of a hill, Borobudur is a stupa (see 12-13 and discussion of The Great Stupa), a place of worship that is not entered, but *circumambulated* (walked around). Here, one is meant to start at the lowest level and follow the walkways until one reaches the highest, circular level and a final stupa at the pinnacle of the hill. Along the way are relief sculptures showing the previous lives of Buddha, then scenes from Buddha's life, and visions of heaven toward the top. If these reliefs were laid out in a row, they would be ten miles long!

Another successful restoration campaign took place in the Angkor Archeological Park of Cambodia, between 1993 and 2004. The most famous site in this area is the Hindu temple complex of Angkor Wat (10-10). Built by Suryavarman II, a King of the Khmer Empire, in the twelfth century, the temple had been overrun by vegetation—not surprising, since the Angkor Park is in the middle of a jungle. Angkor Wat is constructed in the shape of the symbolic "world mountain," with five peaks rising higher and higher toward the center. Originally, it was surrounded by a moat of four thousand by five thousand feet, fed by a huge irrigation system. As at Borobudur, the stone walls are covered with beautiful relief sculptures—in this case representing either the King or the Hindu God Vishnu in his various forms.

It would take hundreds of pictures to explore the glories of Borobudur and Angkor Wat, now preserved for humanity through the efforts of the United Nations. Other cultural wonders on the World Heritage list include Machu Picchu in Peru, the entire city of Venice, Italy, and the pyramids at Giza—the only original remaining wonder of the ancient world.



10-10 Angkor Wat, Ankor, Cambodia, first half of twelfth century.



10-11 Acropolis, Athens, Greece.

The Parthenon

When historians look back to the beginnings of architecture as an art, they usually think of the magnificent structures of the great civilizations of the past. In the ancient world, temples, palaces, monuments, and tombs were the most important art forms. Also, because they are the most visible and lasting remnants of their era, their importance has actually been magnified by the passage of time. No examples of Greek mural painting remain; many statues of the golden age of Greece exist only in later Roman copies. But the architecture of the Athenian Acropolis (10-11) lives on as a symbol of Greek culture, equivalent to the *Iliad* and the *Odyssey*—the works of the great Greek dramatists and philosophers. The Greeks built edifices that speak of human intellect separate and above earthly concerns.

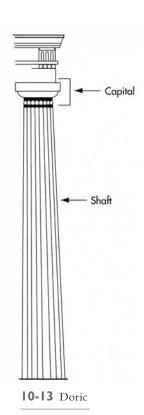
The word *acropolis* means simply "high place," and the Greeks chose such a hill in Athens as a setting for their most important religious center. In 480 BC, during the Persian Wars, the original buildings and statues were destroyed, but the Athenians decided to rebuild the temples to be even more magnificent. The centerpiece of the new design was the famous *Parthenon* (seen at the top of 10–11, and 10-12), a temple devoted to Athena, the patron goddess of the city. Its marble exterior enclosed a magnificent forty-foot statue of the goddess in ivory and gold created by Phidias, the most famous sculptor of the day. The fame of the temple's architects has lasted, too. Almost twenty-five hundred years later, we still know their names—Iktinos and Kallikrates.

Like any building with a long history, the Parthenon has had many different occupants and functions



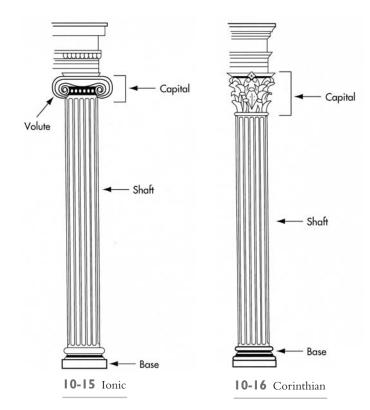
10-12 Iktinos and Kallikrates, rear view of the Parthenon, Acropolis, Athens, Greece, 448–432 BCE.

over the centuries. It became a Christian church during the era of the Holy Roman Empire and an Islamic mosque in later centuries. For two thousand years, it remained largely intact, not the ruin we see today. Then, in 1687, while being used by the Ottoman Turks to store gunpowder, it suffered a direct rocket hit from the forces of the warring Venetians, and much of the interior was blown up. In 1801, a British aristocrat found many of the priceless marble statues lying about in a state of disrepair. According to one's viewpoint, Lord Elgin either saved or stole these statues by shipping them off to England, where they remain, known as "The Elgin Marbles" in the British Museum (see Chapter 12). Despite all its troubles, the Parthenon is probably the most famous, and most studied, human-made structure in the world.





10-14 Kallikrates, the Temple of Athena Nike, Acropolis, Athens, Greece, 427–424 BCE.



The Greek Orders

The Doric column used in the design of the Parthenon (10-13) was the earliest and simplest of the Greek orders (column style). Doric columns were unornamented, almost severe in their plainness. This purity was characteristic of early Greek art. For the Greeks, beauty was to be found in perfection of line, shape, and proportion, not excess decoration. This simplicity, this harmony and repose, gives the Parthenon its universal appeal. Because of the abstract geometric beauty of their designs, Greek temples have been compared to works of sculpture by many art historians. This is certainly demonstrated by the exquisite design of the Temple of Athena Nike (10-14), also on the Acropolis. In this little temple, slim Ionic columns (10-15), their capitals (tops) adorned with graceful volutes (spirals), harmonize with the delicate proportions of the structure. A more decorative order, the Corinthian column (10-16), was rarely used by the Greeks. It was more consistent with later Roman tastes; the famous Pantheon (12-27) uses Corinthian columns both outside and inside.

MATERIALS AND METHODS

Architectural structures have been categorized and described in many different ways. Just as two- and three-dimensional art forms can be discussed in terms of both their materials (or media) and techniques, so various types of architecture can be organized by building matter—such as stone, wood, clay, brick, glass, and steel—and their method of construction. Each material has different visual, tactile, and tensile qualities; each produces a different impression; and each is capable of being used to construct structures of different sizes and shapes.

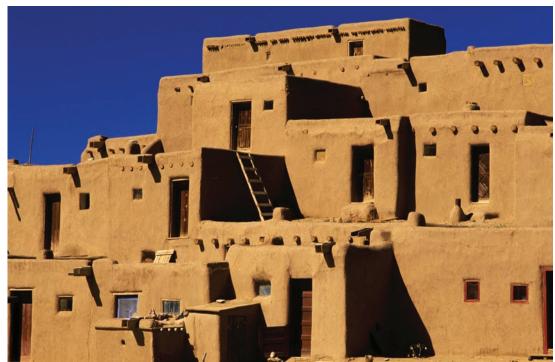
Earth, Clay, and Brick

One way to build is simply to pile up dirt, mud, or clay to form walls. **Adobe** is a kind of sun-dried brick, made of clay mixed with straw, which was used by Native American tribes in the Southwest to build their settlements. In Taos, New Mexico, traditional adobe *pueblos* (10-17), first constructed about five hundred years ago, are still in use and utilize the **bearing wall** method, where the walls support the weight of the roof and floors above. The sun-dried mud bricks are stacked to form thick walls, which are stuck together with a mortar of wet mud. Each building is topped with logs that protrude from the

outer wall. Branches and grass are laid over these logs to form a roof, which is then covered with another thick layer of mud. Finally, the outlines of the bricks are hidden by a hand-smoothed coating of mud, or adobe plaster, which can be refreshed every year.

In adobe construction, the window openings must necessarily be small, since the walls are what hold these structures up. This is actually an advantage in a desert climate, where it is beneficial to keep light, and heat, out of the buildings. The massive mud walls act as natural temperature regulators, providing shade and coolness during the heat of the day as the walls absorb the sun's energy. At night, as the environment cools, these same walls release their heat slowly and keep interior temperatures relatively stable and comfortable. The same process keeps the clay buildings in a Dogon village (10-8) relatively cool even in the heat of Mali, Africa. Long before air-conditioning, and with optimal energy efficiency, these peoples on opposite sides of the world used natural materials to construct attractive and comfortable dwellings.

Bricks are blocks made of clay, usually hardened by being baked in ovens or kilns. Kiln-fired bricks can be glazed in different colors and arranged in interesting patterns. During the early years of the American republic, or what is called the *Federal period* in architecture, many attractive American mansions such as Thomas Jefferson's *Monticello* (see 10–38) were constructed of brick.



10-17 Taos Pueblo, Taos, New Mexico.

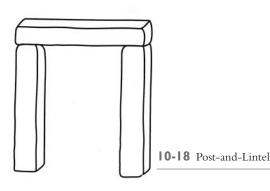
Stone

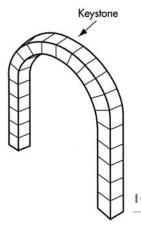
Buildings made of brick are sometimes referred to as being constructed of *masonry*, but that term is more commonly used when talking about structures built of blocks of stone, such as marble or granite. Stone or masonry construction has historically been associated with strength. Castles, fortresses, and the protective walls around settlements were typically built out of stone. Masonry construction was preferred for buildings that were meant to last.

The history of stone buildings is also a story of efforts to open wider and wider areas on the exterior and inside them. The Greeks perfected a form of construction called **post-and-lintel** (10-18), where posts or columns support horizontal lintels

or cross beams. The Parthenon (10-12) provides a clear example of this method. The heavy weight of stone lintels keeps the columns steady. This method permits more open buildings than those constructed by bearing-wall methods and is just as permanent. Temples built of stone thousands of years ago, like those on the Acropolis, are still standing.

A later development in stone construction was the **round arch** (**10-19**), used extensively for the first time during the Roman Empire. The arch allowed far wider spaces between columns than post-and-lintel construction. The huge entrances into the Colosseum in Rome (Chapter 12) are rounded arches. Triumphal arches like the *Arch of Constantine* (**10-20**) are excellent examples of the huge openings permitted by arches.





10-19 Round Arch

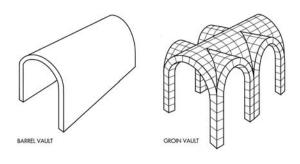


10-20 Arch of Constantine, Rome, Italy, 312-315.

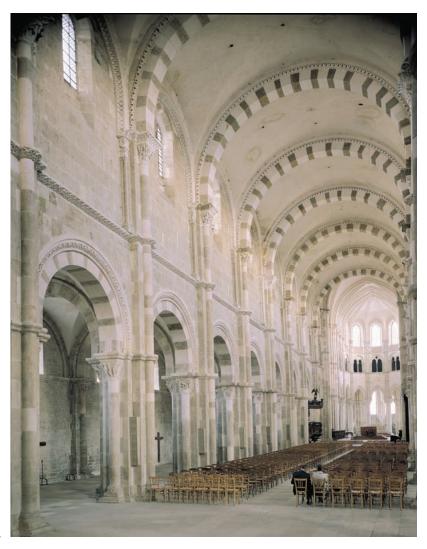
Such triumphal arches were constructed by the Romans throughout the Mediterranean world, symbols of victory to mark their territory and reminders of their governing authority. Carved into the arches were relief sculptures illustrating military scenes and inscriptions that hailed the conquering heroes. The great size of the arches was necessary because of their part in one of the most popular Roman events—the triumphal march. In these parades, trumpets would announce the arrival of their victorious generals on chariot, followed by Roman legions, slaves, conquered treasures, and humiliated enemies.

The use of the arch was expanded during the Middle Ages. **Barrel vaults** (10-21), as seen in the nave of the *Church of Sainte-Madeleine* at Vézelay in France (10-22), opened up large and long public spaces in stone buildings, particularly cathedrals. **Groin vaults** (10-21) are made by crossing two barrel vaults at right angles. Buildings made with barrel

and groin vaults were, however, limited in height by the width of each arch. Only small windows were possible without weakening the stability of the arches. The awe-inspiring impression of Gothic cathedrals,



10-21 Barrel Vault and Groin Vault



10-22 Nave of Sainte-Madeleine, Vézelay, France, twelfth century.

like Amiens Cathedral in France (10-23), is a direct result of the desire to let more light into cathedrals, which led to the invention of the **pointed arch** (10-24). This allowed higher ceilings in the interior and large openings in the outer wall that were filled with glorious stained glass.

Stone has remained a popular and enduring material for building. Great mansions and palaces, as well as important public and religious buildings such as museums, churches, schools, and centers of government, were usually built of stone well into the twentieth century. Even today, when large buildings have skeletons of steel, architects often add stone facings in order to echo the architecture of the past with its associations of stability, permanence, and grandeur.

Wood

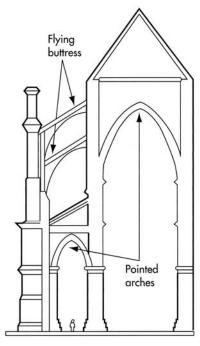
Because of our vast forests, Americans have traditionally made more buildings of wood than any other material. From the rustic "log cabin" to the subur-

ban ranch, wood has been the common material for houses people live in, or what is known as *domestic* architecture. Typical dwellings in colonial New England were built from vertical wooden supports and sturdy horizontal wooden beams, called **frame construction** (10-25), variations of which are still used today for most homes. The sides of the buildings were enclosed in clapboard, boards split or sawed so one edge was thinner than the other. These boards were then laid horizontally, overlapping so the thin edge was under the board above it in order to close out the harsh elements of a New England winter.

The American use of wood seems to have been dictated primarily by convenience, rather than aesthetic preference. In contrast, the Japanese have always constructed in wood because they valued its natural beauty. Traditionally, the wood in Japanese buildings is not painted or finished in any way. For example, because its wood is unprotected, the Japanese Shinto *Ise Shrine* (10-26) has been rebuilt every twenty years for the last fifteen hundred years. The



10-23 Robert de Lazarches, Thomas de Cormont, and Renaud de Cormont, View of the vaults, clerestory, and triforium of the Choir of Amiens Cathedral, France, begun 1220.

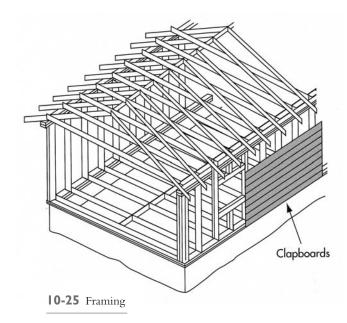


10-24 Pointed Arches in the Gothic Style

shrine is located in a forest setting, and the wood of the building is in harmony with both the site and the Shinto worship of natural forces. For the Japanese, the symbolic and aesthetic value of the natural wood outweigh the expense and inconvenience of regular rebuilding.

The Greene brothers were two California architects who, influenced by Japanese architecture as well as American traditions and a love of nature, developed a style of domestic housing that exploited

the warmth of natural wood for both interiors and exteriors. Their *Gamble House* (10-27, 11-28) is an elaborate "bungalow" of more than eight thousand square feet built for an heir of the Proctor & Gamble fortune. The outside of the building features large redwood timbers and overhanging eaves that protect the home from the California sun. Its open-air sleeping porches, believed to improve health through fresh air, were very popular at the turn of the twentieth century.





10-26 Ise Shrine, Japan. Rebuilt in 1973, reproducing third-century type.



10-27 Greene Brothers, Gamble House (view from the back), Pasadena, California, 1908.

Iron and Glass

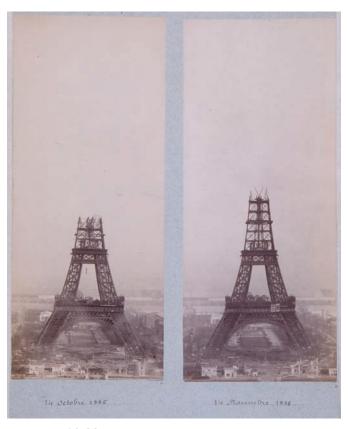
Until the nineteenth century, almost all buildings were made of clay, brick, stone, or wood. The industrial revolution created new techniques that made innovative building materials available. With the advent of coal furnaces and mass production, iron became one of the important new materials of the industrial age. This modern building material was often preferred for new types of buildings, such as factories, warehouses, railroad sheds, and large exhibition halls. Because iron was stronger than wood and lighter than stone, the pillars could be thinner and spaced farther apart than wood or stone posts. Cast-iron columns were combined with large panels of glass to make dramatic, airy exhibition halls, such as the famous Crystal Palace, built for the Great Exhibition of 1851 in London. The most famous and dramatic structure ever built of iron is the Eiffel Tower in Paris (10-28). At the time it was built, and for more than twenty-five years afterward, the Eiffel Tower was the tallest building in the world—one thousand feet high. The tower was built not by an architect but by an engineer and builder of bridges, Gustave Eiffel,

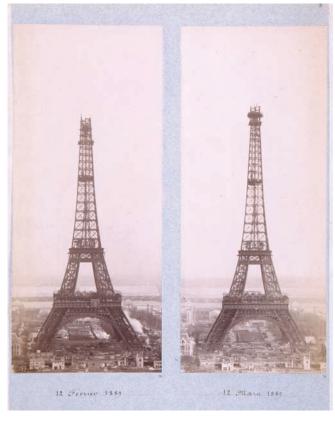
who had previously designed the metal skeleton for the Statue of Liberty. Eiffel's tower was constructed as the focal point for the Paris Exhibition of 1889, one of the many popular international trade exhibits of the second half of the nineteenth century.

The Eiffel Tower was largely an experiment for the potential of iron as a building material. In fact, it was built over the objections of many of the successful artists and writers of the time, who considered its design to be hideously ugly. Later, however, modern artists became fascinated by the tower as a symbol of advanced technology, the machine age, and modern life.

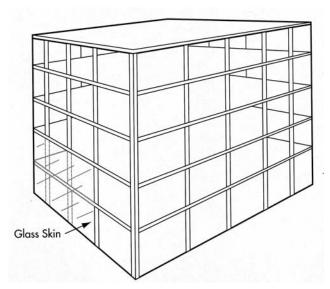
Steel and Glass

Despite its advantages, cast iron enjoyed a relatively brief period of popularity. Although it had been touted as fireproof, the dramatic Chicago fire of 1871 (and, ultimately, the burning of the Crystal Palace in 1936) proved otherwise. Iron actually melted at high temperatures, totally destroying the building it was meant to support. Yet something like iron was needed to hold up the new, taller buildings being constructed in large American cities.





10-28 Construction of the Eiffel Tower, 1888–1889. Musée d'Orsay, Paris (Eiffel Tower Collection).



10-29 Steel-frame Construction

Luckily, a better material was available for the support of the new tall buildings—steel. Steel is both stronger and lighter than iron, and with the development of the steel industry in the 1890s, it became affordable for builders. With a new kind of construction, steel frame or cage (10-29), which employs an interior skeleton for the structure, neither stone walls nor wooden beams are needed for support. Therefore, what we see as the exterior "walls" of a steel frame building are often simply a "skin" of glass. This dramatic innovation in structural design is reputed to have been invented when an architect noticed his bird cage could support a heavy stack of books.

With a better material and a new building method, the way was cleared for an American invention—the skyscraper. The best of these tall steeland-glass towers, or skyscrapers, convey a strong impression of lightness, refinement, and elegance. Such buildings were often used as giant symbols of corporate money, power, efficiency, and modernity during their heyday in the mid-twentieth century. Companies vied with each other as they commissioned new headquarters by the foremost architects of the period, attempting to outdo their neighbors in sheer size. One of the most notable, and welldesigned, commercial structures was the Seagram Building (10-30) in New York by architects Ludwig Mies van der Rohe and Philip Johnson. Built from 1954 to 1958, its exterior is made of amber-colored glass with bronze frames, or mullions. Because of this sensitive and unusual combination of materials, the building at night has been described as a giant "golden crystal."

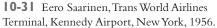


10-30 Ludwig Mies van der Rohe and Philip Johnson, Seagram Building, New York City, 1956–1958.

Reinforced Concrete

Reinforced concrete (or ferroconcrete) became another exciting new building material in the twentieth century. Although concrete (a mixture of cement, sand, and gravel) was a favorite material of the ancient Romans, reinforcing that material with small iron rods enabled architects to make structures that were not only strong but also shaped in dramatic new ways. Most buildings in the past were designed of intersecting geometric forms, such as boxes, cubes, and half-spheres. Buildings of reinforced concrete can be shaped organically as well as geometrically, with walls and roofs like swelling waves instead of straight lines. The *Trans World Airlines (TWA) Terminal* at Kennedy Airport in New York (10-31, 10-32),







10-32 Interior of figure 10-31.

designed by Eero Saarinen in the late 1950s, is an excellent example of the radical potential of reinforced concrete. The building's lines, both interior and exterior, suggest dynamic motion. Looking at its swooping silhouette, one can imagine that the entire terminal has just landed and is almost ready to take off again. Interior features such as ticket and information booths, signboards, and stairways, resemble organically shaped abstract sculptures.

Travelers were treated to a fascinating experience as they walked through the terminal. It seemed more like a living creature than an anonymous and prosaic box. Far more than most structures, Saarinen's Trans World Airlines Terminal exploits the symbolic possibilities of architecture as a three-dimensional art form. Every aspect of the building is meant to be "all of one thing," speaking of movement, flight, and escaping the bonds of gravity. Going beyond the idea of "form follows function," Saarinen's buildings are functional not merely in a practical sense but in a spiritual one as well.

Sadly, the terminal closed in 2001, when TWA went out of business after September 11th, but its architectural importance saved it from destruction. Recently, JetBlue agreed to use it as an entryway to a new terminal, promising that people will once again be able to experience this endangered landmark.

Computer-Aided Architectural Design

The digital age has had a huge impact on architecture, just as it has had on many of the other artistic media. It has changed the methods all architects use for designing and engineering buildings. In the past, working with metals and glass required a fundamentally box-like approach for the necessary structural strength to hold the great weight of a building. But computer-aided design (CAD) has allowed building design with metal construction to move beyond straight lines and right angles, freeing architects to use voluptuous curves and unusual slants. Frank Gehry's Guggenheim Museum in Bilbao, Spain (10-33) takes advantage of these new techniques to create architecture that would have been, if not unimaginable, impossible twenty years ago. Bilbao appears more like a huge abstract sculpture than a building. Its steel forms clad in titanium swell and flow in sensuous shapes that come to a dynamic, assymetrical balance. Heavy forms seem to blow in the wind.

One might guess that the complexity of the building was a construction crew's nightmare. Few joints meet at right angles and little is predictable, so detailed three-dimensional drawings are required for every location in the huge 250,000-square-foot

building. The blueprints for buildings by Gehry are thicker than Manhattan phone books and filled with intricate computer illustrations.

But the people of Bilbao knew the effort was worth it. Their once-rich industrial city had fallen on hard times. The regional government commissioned Gehry in the hope that the museum would help revitalize it. Nothing could have prepared them for the impact the Guggenheim Museum has had. Bilbao has become one of the most visited museums in Spain (on most days the curves of the museum are reflected in the long curves of people waiting to enter), and the city is now an important cultural center. The museum is a renowned work of art, and the success of its design has become the measure for all new museums.



10-33 Frank Gehry, Guggenheim Museum of Art, Bilbao, Spain, 1997.

ARCHITECTURE IS A PRODUCT OF ITS TIME AND THE PAST

Great architecture is a combination of many things. Like all art, it reflects the needs and ideals of its time. It is a powerful marriage of materials and structure, a dialogue with its natural setting, a solution to practical considerations, and an expression of ideals. It

is built on a knowledge of contemporary methods and an awareness of forms of the past. Like all art, architecture is the tangible expression of the needs and ideals of the time period in which it was created. Let us focus on two closer studies of buildings. One, Saint Peter's Basilica in Rome, was the work of several architects over one hundred fifty years. The second was the personal vision of one man, Thomas Jefferson's home at Monticello.



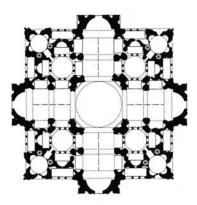
10-34 Saint Peter's Basilica, Rome. Apse and dome by Michelangelo, 1547–1564; dome completed by Giacomo della Porta, 1588–1592; nave and façade by Carlo Maderno, 1601–1626.

Saint Peter's

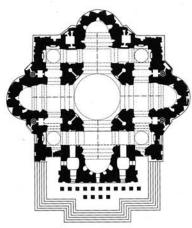
Some of the greatest monuments of the past are the result of many years, several generations, or even centuries of work. Saint Peter's Basilica in Rome (10-34), the center of Catholicism and for centuries the largest church in the world, was constructed by four major (and several minor) architects over a period of a century and a half. In the early Renaissance, Pope Julius II decided to rebuild the decrepit and very ancient Saint Peter's Basilica. The pope wanted to create a new monument that would rival in size and splendor the Roman ruins that remained in the city. In 1506 the project was given to Donato Bramante, who designed a large church in the form of a cross, the center of which marked the spot where Saint Peter (an apostle of Christ and the first bishop, or pope, of Rome) was supposed to have been buried. The ambitious interior floor plan (10-35, left) was actually based on a complex pattern of nine intersecting crosses, eight small domes, and one huge dome. Because of the mammoth scale of his plan, when Bramante died in 1514, very little of the building had been finished.

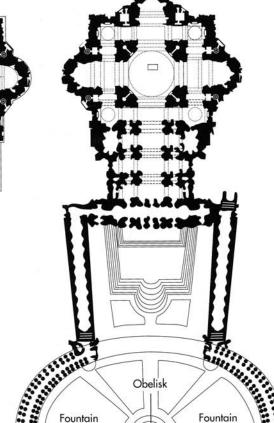
Michelangelo took charge of the project thirtytwo years later. He criticized much of the work that had been done since Bramante's death and tried to return to the overall original plan, although with some simplifications. For example, he changed the interior space from many crosses into a single cross intersecting with a square (10-35, center). He redesigned the exterior, adding colossal columns. Michelangelo also planned a high central dome but later changed his mind in favor of a lower dome, more like Bramante's. But Michelangelo, too, did not live to see Saint Peter's built. After his death an architect named Giacomo della Porta was given the job of building the dome and chose Michelangelo's earlier conception, probably because the higher dome was easier to build (10-36).

In 1603, almost one hundred years after work on Saint Peter's had begun, Carlo Maderno was given the job of enlarging and finishing the basilica. Maderno was directed to add a nave, or rectangular-shaped room, to the front of Michelangelo's Saint Peter's. He broke into the main façade of the building and projected out, changing the shape of the



10-35 Bramante, 1506; Michelangelo, 1547–1564; Bernini, 1656–1663.





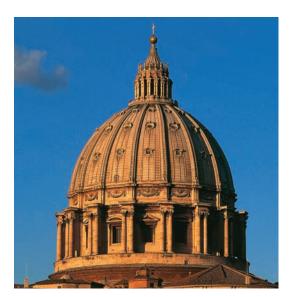
perfectly symmetrical proportions of the Renaissance building and obscured the dome.

The last major architect to contribute to Saint Peter's was Gianlorenzo Bernini, the most famous sculptor of his time. Once surrounded by noisy, narrow streets with wandering animals, Saint Peter's was given a more appropriate environment by Bernini. He sculpted the space in front of the building by means of a **colonnade**, or row of columns, and the addition of a **piazza**, or courtyard (10–35, right; 10-37). His colonnade is like a pair of great arms that shelter a quiet, orderly courtyard from the distractions of everyday life and draw pilgrims into the

entrance. Thus the building's surroundings became

self-contained and harmonious.

structure and bringing it forward into Saint Peter's square. This new façade (see 10-34) destroyed the



10-36 Dome of Saint Peter's Basilica, Rome.



10-37 Saint Peter's Basilica and the Vatican, Rome. View of colonnades by Gianlorenzo Bernini, 1656–1663.



10-38 Thomas Jefferson, Monticello, Charlottesville, Virginia, 1770–1806.

Monticello

Thomas Jefferson was a man of diverse talents and interests—a farmer, statesman, and scholar as well as an inventor and architect. Heir to a comfortable Virginia estate, he can be described as a gentleman-amateur architect, a type common in the eighteenth century. While serving as the American ambassador to France, he had visited Italy and had seen the ancient ruins. But even before visiting Europe, Jefferson had studied classical architecture through English books. Jefferson was attracted to Greek and Roman architecture because of its historical associations of good government, as well as its style and simplicity. Now that America was independent, he was eager to replace the British-influenced colonial style.

In Monticello (10-38), Jefferson had the chance to design his own dream house. The home took more than thirty years to complete to his satisfaction. Set on top of a mountain (unlike other Southern plantation manors of the period), Monticello reveals an eighteenth-century taste for combining classical architectural elements, like columns, domes, and simple

geometric shapes, with a natural, romantic setting. As a classical scholar, Jefferson was particularly fond of Roman poets, who described the delights of country life in a villa, and he himself wrote about the view from his home:

Where has nature spread so rich a mantel under the eye? mountains, forests, rocks, rivers. With what majesty do we there ride above the storms! How sublime to look down into the house of nature, to see her clouds, hail, snow, rain, thunder, all fabricated at our feet! and the glorious sun, when rising as if out of a distant water, just gilding the tops of the mountains, and giving life to all nature!

Stripped of excess ornament and conveying a sense of purity, Monticello is harmonious and calm. Its beauty can be appreciated at first glance; carefully designed in human scale, the building does not overwhelm or awe the visitor. Monticello looks like what it is—a building meant to encourage a mood of speculation and intellectual pursuits, as well as gracious family living. The simple, empty room under the dome is particularly lovely, like a material

representation of the human intellect, or Jefferson's extraordinary mind (10-39).

But Jefferson's pursuit of ideal beauty and idyllic lifestyle had a darker side. Both the money and labor he used to create his dream house and the life he lived there were produced by slave labor. (Of course, this was also true of the Greek and Roman civilizations that he admired, although their slavery was not based on race.) Jefferson's *Monticello* reflects the ideals of individualism and respect for private property embraced by the founding fathers of the United States.

The powerful expression of ideals in architecture can influence building for decades, even centuries to come. Monticello, itself a reflection of the endurance of classical Greek and Roman architectural ideals, had a profound and powerful effect on American architecture. Saint Peter's has also influenced countless buildings throughout the Western world. The style of our own *United States Capitol* building (10-40) owes as much to Michelangelo's dome as to Jefferson's promotion of neoclassicism for the government buildings of the new republic. It is just one example of the power of architecture to both express and transmit cultural values.

URBAN PLANNING

Beyond the design of individual buildings and their settings, contemporary architects are also concerned with *urban design* or *planning*. The question of how a city of the future should look is a fascinating one that has been answered in many ways during the past fifty years. This question has taken on special importance because many people find today's cities—with their crowding, traffic, crime, pollution, and lack of greenery—an unlivable nightmare.

When the Modern movement in architecture was at its height in the mid-twentieth century, a standard kind of plan was devised to reform the design of cities. One of the major innovators and creators of the new urban planning was Le Corbusier (10-41), a Swiss-born Frenchman who worked around the world. Le Corbusier designed any number of new neighborhoods and housing projects for cities from Paris to Pakistan; most were never built, but some were, and the ideas behind them became quite influential. The idea of these plans was to house people in highrise apartment complexes, surrounded by parks and recreational areas. It was hoped that such developments would allow for both living and leisure.



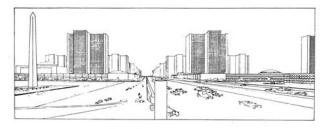
10-39 Thomas Jefferson, interior of dome at Monticello.



10-40 Benjamin Latrobe, United States Capitol, Washington, D.C., designed c. 1815.

Pedestrian walkways would be separated from roadways, so people could walk without being bothered by cars, and vice versa.

The designs of Le Corbusier and others looked good on paper, but rarely fit the tastes or needs of ordinary people. Human beings, it seems, prefer smaller, more separate residences and what might be called semiprivate space—like yards and gardens to huge apartment dwellings surrounded by large, communal parks. One housing complex built on the modern plan, the Pruitt Igoe Housing Project in St. Louis, won an architect's award the year it was built but proved such a failure (because of crime and vandalism) that it was demolished about twenty-five years later. In 1960, a brand-new capital was opened in Brazil, called Brazilia. Built from scratch in an uninhabited portion of the country by followers of Le Corbusier, it was a "perfect" city, planned for the modern world. Today, it seems very dated; its concrete is crumbling, and its inhabitants are attempting to find ways to make the city livable.



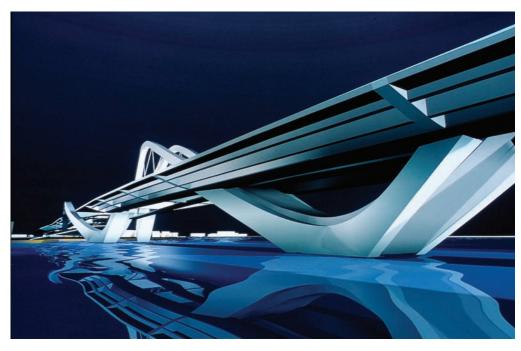


10-41 Le Corbusier, plan for a contemporary city for three million inhabitants, 1922.

CONTEMPORARY APPROACHES

As you might imagine from previous chapters, contemporary approaches to architecture both blur boundaries between different artistic media and make use of new technologies. Within the past decade, architecture has more than broken out of the glass-and-steel box (and variations thereof) that dominated twentieth-century modernist design, and has exploded in all directions, materially, visually, technologically, and conceptually.

Architect Zaha Hadid, born in Iraq but educated in London and practicing architecture around the



10-42 Zaha Hadid, Sheikh Zayed Bridge. Courtesy Zaha Hadid Architects

world, began by attracting international attention for her innovative designs, yet most of her larger projects were never built. It is as if society had to enter the twenty-first century to have the courage to construct her dramatic, and dramatically different, museums, factories, bridges, and stations. Instead of rigid, geometric shapes, Hadid—like Frank Gehry—prefers swooping lines and fluid spaces, designed using digital animation programs. Her Sheikh Zayed Bridge, in Abu Dhabi (10-42), seen here in a computerdrawn proposal, suggests the speed of contemporary life, with arches designed to echo desert sand dunes. In 2004. Hadid became the first woman to win the prestigious Pritzker Architecture Prize. According to a member of the jury that made the award: "Hadid's fragmented geometry and fluid mobility do more than create an abstract, dynamic beauty; this is a body of work that explores and expresses the world that we live in."

As pioneering and novel as Hadid's works appear, and however challenging to construct, they can still be recognized as buildings. The same can not be said for Diller & Scofidio's *Blur Building* (10-43), a pavilion designed for the Swiss National Expo in 2002.

Here husband-and-wife architects Elizabeth Diller and Ricardo Scofidio created a platform surrounded by a human-made mist, suspended over Lake Neuchatel. Reached by a long ramp, the pavilion appears like a cloud from the distance. Here the building material is neither stone, wood, steel, glass, nor any solid material, but tiny drops of water. According to the artists themselves:

the focus of diller & scofidio is as much about the nature of space as it is about creating spaces, their architectural practice utilizes design, performance, and electronic media with architectural and cultural theory as accompanying tools to investigate architecture as a field of social relationships and to remind us that architecture is everywhere.

Contemporary architecture, like that of Hadid, Diller, and Scofidio, is meant to be experienced and to challenge both our preconceptions about buildings and our ways of viewing the world. In that sense, they are as typical of contemporary fine artists as they are of architects. Our next chapter will explore the various crafts media from which humans have made both useful and beautiful objects to decorate the inside, and outside, of architectural spaces.



10-43 Diller & Scofidio, Blur Building, 2002.

Decorative Arts, Crafts, and Design

veryday, useful objects—either handcrafted or designed to be mass produced—are an immediate, accessible way for most of us to enjoy the power of art. Just as architecture is an art form we can experience directly, even live in, so *crafts* and other *applied* or *decorative* arts are things we live with. Attractive and functional, such ornamental items can be made of almost any material. Ceramics, glass, wood, metal, and fiber are some of the most common craft media, while the *design* arts can be reproduced in materials ranging from paper to steel. Because both crafts and design interact with us in our normal lives, they occupy a special place in people's hearts, giving pleasure that is both aesthetic and nostalgic.

What is the difference between fine art, decorative arts, crafts, and design? We posed this question in the first chapter, and answered it by suggesting that the applied arts—decorative arts, crafts, and design—were meant to be used, while fine art exists simply to be admired, as "art for art's sake." In this chapter we will complicate the question. Before the Renaissance in the West, there was no clear-cut distinction between a painter and the person who created the golden frame in which a painting was set—both were artists and craftsmen. Part of the Renaissance emphasis on individual genius was to raise artists like Leonardo da Vinci and Michelangelo above craftspeople who made furniture, clothing, jewelry, or glassware. By the mid-nineteenth century, the applied arts were sometimes described as the minor arts, versus the major arts of painting and sculpture.

As explained in the first chapter, such distinctions did not exist in other parts of the world. In Japan, a teacup can be considered a priceless work of art (see GlobalView box). In the West, luxury goods—like expensive textiles, china, and silver—have been admired both for their aesthetic qualities and for the status they conferred on their owners. Precious and beautiful objects, from silver tea sets to cigarette cases, now fill the Decorative Arts galleries of many museums.

The advent of mass production had a particularly dramatic impact on artists' attitudes toward crafts and design. Hailed as a fabulous advance in supplying human needs, the Industrial Revolution of the late eighteenth and early nineteenth centuries began spewing out vast quantities of china, tableware, glasses, textiles, and furniture. At first, consumers were delighted with this mass production of cheap, ready-made goods that could be purchased for far less than their handmade ancestors. Manufacturing also opened positions for artists as professional designers of everything from carpets to lamps. However, artists soon reacted against this flood of machine-made stuff. Some called for a return to traditional handcrafted objects, others for better design of manufactured goods. Today, some artists continue to make their own creations in home studios and sell them at craft fairs and stores specializing in unique objects, while others design industrial products for huge corporations. Both approaches can result in beautiful, and practical, works of art.

To complicate matters further, however, many contemporary artists use craft media—such as ceramics and fiber—to create works of art that clearly cannot be used. Once again,

the line between media continues to blur in today's world. Nevertheless, the same elements of art—line, color, texture, shape—and the same principles of design, such as balance and harmony, apply to all of the visual arts, whether fine or applied, handmade or mass-produced.

We have divided this chapter into two sections, crafts and design. First we will explore each of the major craft media—ceramics, glass, fiber, metal, and wood—both historically and as used by contemporary artists. Then, we will consider the different fields of design, including graphic arts and industrial design. We will end by looking at the fusion of many different media in interior and landscape design—the ultimate in multimedia arts.

THE CRAFT MEDIA

Ceramics

Clay, used by sculptors to model statues, is also the media used to make what is known as ceramics. Clays are types of earth that have the property of becoming moldable, or plastic, when wet, and then more rigid again as they dry. Such material is transformed into pottery when it is heated in a closed oven, or kiln, until it becomes permanently hard. The art of ceramics, or pottery, is the result of two distinct processes—the molding of the object and the decoration of its surface. The final color and texture of a ceramic piece is affected by the variety of clay and the type of fire used, but the most important way of coloring and decorating anything made of ceramics is by glazing. A glaze is somewhat like paint, but ordinary paint would disintegrate under the high temperatures of the kiln. Glazes melt into and actually fuse with the clay of the ceramic while being heated. Usually ceramics are fired at least twice—once to set the shape of the piece, and again to incorporate the glaze onto its surface. Over the centuries, special methods of glazing have been discovered, each creating a different effect on the surface of the fired clay.

For instance, the Chinese, who considered ceramics one of the highest forms of art, experimented with both firing temperatures and glazes to achieve exquisite results. Baking at a high temperature transformed their clay objects into a material of glasslike hardness called stoneware or porcelain, or what Europeans simply called "china." Chinese porcelain pieces were prized throughout the world for their elegance, their purity of design, and their delicacy, which symbolized their expense. The production of fine porcelain also spread to Korea, where this Pearshaped Vase (II-I) was fashioned during the Koryo period, in the thirteenth century. Although this vessel looks like a vase for flowers, it was designed to hold alcohol, like the small china bottles used to serve sake in Japanese restaurants today. The pale

green color of the vase, called celadon, was highly prized for its resemblance to precious jade. The perfection of the silhouette, the thinness of the ceramic walls, and the subtle floral decorations in white and darker green (encrusted under the glaze) transform this simple clay vessel into an aristocratic status symbol, similar to those created in China during the same period.

The process of glazing is important for practical as well as decorative reasons. Not all pottery is fired at the high temperatures required to produce the glassy



11-1 *Pear-shaped Vase for Alcohol*, twelfth—thirteenth centuries. Korea, Koryo period. Celadon ceramic, with incrustations of glaze. 32.5 cm. Musee des Arts Asiatiques-Guimet, Paris, France.

hardness of porcelain. More porous earthenwares require a glaze to become sealed. This is particularly important because the primary use of pottery has always been for making *vessels*, or containers. Before the development of plastic, or the manufacture of glass and metals in large quantities, ceramic vessels performed vital functions for the societies that created them. Used in such everyday activities as eating and drinking, as well as in special religious rituals and ceremonies, vessels were both a necessity of life and a means of artistic expression.

Several methods are possible for making vessels out of clay. The easiest is by simply pinching and shaping the clay into the desired shape. Another technique is to build the container by flattening clay like cookie dough and cutting out slabs that can be pressed together to form boxlike shapes. Another common way to make pottery containers is by coiling long ropes of clay and forming them into the desired shape, then smoothing out their sides by hand. This is the method used by Native Americans. Such ways of building pots by hand allow the artist great freedom in determining the size and contours of the vessel, which can be rounded or rectangular, asymmetrical, or any shape at all.



II-2 María Montoya Martínez and Julian Martínez, jar, San Idefonson Pueblo, New Mexico, c. 1939. Blackware, 11 ½" × 1′ 1″. National Museum of Women in the Arts, Washington, D.C. (gift of Wallace and Wilhelmina Hollady).

María Martínez and her husband Julian were twentieth-century potters who worked in the traditional Native American methods (11-2); she built pots by hand, and he decorated them. Almost by accident, they also developed a totally new style of ceramics. During an archaeological dig near their home, the San Ildefonso pueblo in New Mexico, María was approached by scholars who asked her to recreate a type of black pottery that had been found only in fragments. After studying the pieces, she reconstructed the shape of an entire pot, while Julian attempted to copy the black color by smoking the pots in a fire. When the experimental pottery was admired by visitors, the couple began to try out different methods of black-on-black decoration. The final result was a unique type of pottery in which the shiny black pot is painted with a design in matte (or dull) black. Julian Martínez adapted these designs from historic American Indian patterns.

The invention of what is called the potter's wheel (as long ago as 4000 BC.) was a technical advance on the laborious methods of forming ceramic vessels. The wheel is actually a horizontal disc mounted on a vertical pole; the speed at which the wheel whirls is controlled by the potter. As the wheel turns, a lump of clay can be lifted and shaped by hand into a vessel, in an action called **throwing**. There is something fascinating about watching a potter at work, live or on film, and observing the drama of the craftsperson creating a vase, cup, or bowl out of a clump of earth. The sides of the vessel actually seem to grow up from the moving wheel as if springing to life. In contrast to clay vessels made by hand building, thrown pots are always rounded and symmetrical. However, the wheel has not completely replaced methods of coiling and constructing; peoples around the world and contemporary artists still use all three methods.

The ancient Greeks used the potter's wheel to make symmetrical vessels for storing and serving both foods and liquids, like the *Exekias* amphora. Such *amphora* (vessels with two handles) were often decorated with episodes from the myths of the Greek gods and heroes. The *Exekias* amphora of the sixth century is named after an ancient artist, both potter and painter, who signed his work prominently. This painting shows a scene from Homer's epic poem the *Iliad*, the heroes Achilles and Ajax intent on a game somewhat like modern checkers (11-3). In order to achieve this black-figured decoration, the potter painted the design in a thinned clay (or *slip*) that turned black during firing. He also incised fine lines into the clay.



11-3 Exekias, *Achilles and Ajax Playing a Dice Game* (detail from an Attic black-figure amphora), from Vulci, Italy, c. 540–530 BCE. Whole vessel approx. 2' high. Vatican Museums, Rome.

Glass

The medium of glass has a different quality than the other materials discussed in this chapter. Unlike clay, metal, wood, or fiber, glass is usually either transparent or translucent. That means that light becomes an integral part of glass objects. Glass is made primarily of silica, or a kind of sand, plus other minerals that add color. Once heated until it becomes viscous (or the consistency of jelly), glass can be shaped by blowing or molding and pressing. The glass surface can be decorated by cutting, engraving (with a tool), etching (with acid), enameling, gilding, and painting, but often the most beautiful glass is decorated by the colors and bubbles within the glass itself. Thus the pattern is an integral part of the glass object, as is seen when you look into the center of a glass paperweight. In the decorative arts, glass is used primarily in two ways: as stained glass for windows, lampshades, and screens, or as blown glass for vessels such as goblets, vases, bottles, and pitchers.

The greatest period of stained-glass artistry is considered to be medieval times, when multicolored glass paintings were used to fill the long windows of Gothic cathedrals. Of all these cathedrals, that of Chartres in France (see Chapter 13) has the most beautiful, best preserved, and complete set of original windows. Unfortunately, photographs cannot recreate the transparency and glow of the colors or the way that light passing through the windows reflects their multicolored patterns on the interior of the cathedral. The deep, brilliant blue of the windows is justly famous and has never been duplicated.

During the nineteenth century, a revival of interest in both the Gothic period and the decorative arts occurred. One American painter, John La Farge, particularly admired the French medieval stained glass he had seen during his European travels. As La Farge

GLOBAL VIEW

Japanese Aesthetics: The Tea Ceremony and the Zen Garden

he art of ceramics is judged to have reached its highest level in Asia. Chinese porcelains are valued by collectors all over the world for their elegant shapes and glazes. The Japanese have used pottery to express a different aesthetic. While Chinese ceramics tend to look fragile and perfect, the Japanese stress a rustic simplicity in their pottery, especially vessels associated with the *tea ceremony*.

The tea ceremony is a unique and interesting part of Japanese culture. Developed during the political upheavals of the sixteenth century, the *Cha-no-yu* (*cha* is the Japanese word for tea) is a kind of ritual performance in which the audience takes part. The host, or tea master, will invite a small group of friends to a modest teahouse of unpainted wood, located in a secluded garden. The purpose is not so much to drink green tea as to contemplate art, usually a hanging scroll decorated with painting or calligraphy, and a simple flower arrangement. The utensils in which the tea is made, such as tea bowls and water jars, are considered part of the artwork to be admired. The setting, the ceremony, the artwork, and the utensils are all supposed to conform to the principles of harmony, respect, purity, and tranquility, and above all to *wabi*, the principle of quiet simplicity.

Over the centuries a certain style of pottery has come to be associated with the tea ceremony. Called **raku**, these tea utensils are made of hand-shaped earthenware, painted with a lead glaze and fired at a relatively low temperature. The shapes of the tea bowls are irregular and asymmetrical, the glazes thick and rough. Their very imperfection is prized as a mark of the masters who formed them. Just as the line of a great artist can be seen in a drawing or painting, so the spontaneous, personal touch of the potter is valued by the Japanese. Names of great potters of history are well known, and their pots are extremely valuable. Some of the ceramic vessels associated with the tea ceremony are so famous that they have individual names, like *Mellow Persimmon*, *Gold Moon*, and *Five Mountains*, and have been designated as national treasures of Japan. This tea bowl (II-4) was created in the seventeenth century by Raku Ichinyû, one of a long line of potters (now in its fifteenth generation!), and the family after which raku ware was named.

II-4 Raku Ichinyû, *Teabowl*, Japanese, Edo period, seventeenth century, British Museum, London.



II-5 Ryoanji Zen Temple, Japanese Sand Garden, Kyoto, Japan, c. 1525. Stones and bare white sand.



A GLOBAL VIEW

To see a picture of a tea bowl is only to experience a tiny fraction of its aesthetic meaning. According to the Raku museum in Kyoto, Japan: "To hold a tea bowl is to grasp a microcosm of the universe in one's palms. It is to experience through one's fingers the delicacy and soft tactility of its form, the texture of the clay and glaze, its volume and mass, the finish of its foot and the contours of its interior."

The Japanese approach to landscape architecture is also unique. The Zen rock garden of Japan (II-5) is an approach to designing a haven of tranquility that many Westerners find mystifying. One does not walk in the garden but observes it from above on a long, porch-like platform. It appears at first as quite empty and barren. There are few plants; most of the surface is carefully raked sand around large stones. The Zen garden's purpose is to remove us from our insignificant worldly concerns and to stop the constant activity of everyday life.

After sitting down, one can see the pattern in the raked lines, the careful attention paid to the spaces between each rock—rocks placed centuries ago. One can hear the birds, the insects, and the wind. The Zen garden offers the opportunity to regain one's focus in a place that eliminates all distractions. It is a quiet place meant to form, according to a Zen monk, "a lasting impression in your heart."

began to experiment with making his own paintings in colored glass, he developed new techniques unknown to medieval craftspeople. La Farge looked for glass that was irregular, streaked, textured, or imperfect. Soon he was supervising the manufacture of glass with unusual colors and textures. He particularly liked to use glass that was *opalescent*, or reflective of many different colors. Eventually he placed pieces of glass behind each other to create richer and deeper hues—essentially mixing new colors by combining two shades of glass. Instead of limiting himself to the flat effects of medieval glass, La Farge used glass to create the illusion of shading and depth, just as in a nineteenth-century painting.

Where medieval stained glass had been used only in churches, to tell religious stories, the stained glass designed by La Farge and other artists in the late nineteenth century was often used to decorate private homes. For instance, in the early 1890s, La Farge created a set of windows for the Washington D.C. dining room of John Hay, the future Secretary of State. The windows, one of which is *Peonies in the Wind with Kakemono Borders* (11-6), were inspired by the artist's love of Japanese art. The subject and composition reflect the contemporary craze for Japanese aesthetics (see box in Chapter 17); the border was inspired by the design of a type of Japanese brocade used to edge scroll paintings. Here, La Farge

11-6 John La Farge, Peonies in the Wind with Kakemono Borders, c. 1893. Stained glass, 56" × 26". Gift of Senator Stuart and Congressman James M. Symington, Smithsonian American Art Museum, Washington, D.C.



translated Asian influences into a medieval medium for an American collector.

Glassblowing is a craft requiring both skill and strength. Because it is heated to a molten state, glass cannot be shaped by hand as other materials are. Instead, it is picked up in a small spherical blob at the end of a long metal pipe, then blown into bubbles of various shapes. The bubble is quickly shaped with a variety of tools, sometimes rolled against a hard surface. If the glassblower is not pleased with the result, he or she can simply reheat the glass to a molten state and try again. When the glassblower is satisfied with the shape that has been created, the glass must be removed from the pipe to cool slowly. Thin threads of glass can be wrapped around the basic shape to add interest to the design, and smaller pieces can be added for handles.

In America, the name most associated with glass-making is that of Louis Comfort Tiffany. Tiffany was strongly influenced by French Gothic stained glass, especially the windows of Chartres. Tiffany's studio produced not only beautiful stained-glass windows, wall panels, and screens but also blown-glass vessels and decorative lampshades. For instance, his glass-



11-7 Louis Comfort Tiffany, Vase, 1921. Favrile glass, h. 13". Gift of Joseph H. Heil. The Museum of Modern Art, New York.

blowers produced the favrile glass vase illustrated here (11-7). Note the organic contours of the glass, flaring like the trumpet of a living flower. The swirling iridescent patterns are actually part of the glass itself.

Metalwork

Humans have used many types of metal to shape beautiful decorative objects—gold, silver, iron, bronze, lead, and copper. The items made range from the giant iron gates for a palace to the most fragile jewelry. Metal can be cast or welded, but it can also be **forged** (or heated) and **wrought** (or hammered) into shape. This latter method is used by blacksmiths to make everything from horseshoes to door hinges and kitchen pots. Metal can also be hammered into sheets, which are then cut and built into the desired shapes. For jewelry, precious metals are also combined with other materials such as stones, jewels, or enamel.

The pre-Columbian civilizations of Peru produced expert silver- and goldsmiths. The most famous of these cultures is that of the Incas. The Incas valued gold and silver for their artistic qualities rather than their monetary worth. In fact, they used no coins or money. Precious metals were reserved for the noble class because of their beauty. Gold was especially important because it symbolized the color and warmth of the sun, and the Incas considered themselves to be descendants of the sun god.

The Spanish conquistadors, led by Francisco Pizarro, found entire Incan cities decorated in gold. However, they were not particularly interested in the aesthetic value of the South American ornaments, although they admired them as curiosities. Almost all of the golden artwork collected by the Spanish in the new world was eventually melted down into gold ingots before or after it was taken to Europe.

Luckily for posterity, the pre-Columbian Peruvians had a cult of the dead somewhat like that of the ancient Egyptians (see Chapter 10). They mummified bodies, wrapped them in precious woven cloth, and buried them with golden ornaments. Long before the Incan period, sculpted golden masks were placed over the faces of the dead, who were accompanied by ceremonial golden daggers called *tumi* (11-8). Such daggers are often decorated with figures of stylized rulers or gods, shown in elaborate headdresses and jewelry. In this tumi (from the Lambayeque culture that preceded the Incas by several hundred years), the gold has been *inlaid* with turquoise stones that form the eyes and highlight headdress, jewelry, and costume.

Although the Spanish conquerors may not have appreciated the aesthetic qualities of American metalwork, European goldsmiths created elaborate works of art according to their own standards of beauty. As in Peru, such craftspeople usually worked for the nobility. In 1884, Czar Alexander III of Russia called on the master jeweler Carl Fabergé to design an Easter present for his Empress. Easter is the most important holiday of the Eastern Orthodox Church. For the gift, Fabergé made a golden egg, the egg traditionally symbolizing the resurrection of Christ. Inside the egg he placed a surprise, a golden hen with rubies. The Easter egg so delighted the empress that the czar and his son Czar Nicholas II would order Imperial Easter Eggs for the next thirty years (until the Russian Revolution removed the czars from power). These "fantastic objects," as Fabergé called them, are some of the most famous examples of the jewelmakers' art. The Lilies of the Valley Egg (11-9) is a wonderful illustration of Fabergé's fertile



11-8 Figure of a crowned God (Naym-Lap), Lamayeque Culture, c. 700–1100, region of Illimo, Peru. Gold, precious stones, h. 40 cm.



11-9 House of Fabergé, *Lilies of the Valley Egg*, 1898. Gold, enamel, diamonds, rubies, pearls.

imagination. Presented by Nicholas II to his mother in 1898, the pink egg (made of gold but enameled) is surrounded by bands of diamonds and mounted on legs designed as golden leaves. Growing up its sides are lilies of the valley, whose flowers are pearls topped with gold and diamonds. At the top of the egg is a crown covered with diamonds and rubies. To discover the surprise, Nicholas's mother had to find the key: One of the pearls is a button. When turned, miniature portraits of her son and her two grand-daughters in jeweled frames rose up from beneath the crown.

Fiber Arts

The fiber arts include weaving, embroidery, appliqué, quilting, embroidery, knotting, beadwork, and any other forms of decorative art made with thread or textiles. Weaving, like pottery, is a very ancient form of art; according to Homer's *Odyssey*, Penelope,

the faithful wife of the hero Odysseus, spent the ten years of his absence weaving. Cloth can be woven out of fibers, such as wool, cotton, flax, and silk, into many different patterns, textures, and strengths. Most weaving is done on a **loom**, where one set of parallel threads, the **warp**, is held in a tense position. To make fabric, another set of parallel threads, the **weft** or *woof*, is arranged at right angles to the warp. The fabric is filled in by bringing these weft threads in and out, moving them back and forth, interlacing them with the warp. By using threads of different colors and textures, elaborate designs can be created. Although most cloth is used for making clothing, weaving can also provide decorative items such as carpets and wall hangings.

The most famous carpets in the world have come from the Middle East, where the geometric and organic patterns of Islamic art—also seen in tiles, calligraphy, and architectural decoration—have been translated into elaborate floor coverings. In this example, The Ardabil Carpet from Iran (II-I0), a central sunburst motif is echoed at each of the four corners, while delicate blossoms connected by scrolling lines seem to float on a dark blue background. The pattern was created by hand-knotting wool in ten colors onto a silk warp and weft—304 knots per each square inch, over the entire surface of more than thirty-four by seventeen feet! The style is typical of carpets produced in the sixteenth-century Iranian Safavid kingdom, where the art of designing Persian carpets reached its height. This particular carpet is "the world's oldest dated carpet, and one of the largest, most beautiful, and historically important in the world," according to the Victoria & Albert Museum, where it now hangs as the highlight of a new Islamic gallery.

In the West, quilting and embroidery have historically been done by women who did not have the freedom to become professional artists. The feminine "needle arts" provided an opportunity for women to express themselves creatively, painting their designs in thread and fabric. Such designs have ranged from pictorial and narrative, as in embroidered samplers showing people and places, to completely nonrepresentational, as in geometrically patterned quilts.

Some women have consciously used fabric and thread to make pictures that tell stories. This was the case with Harriet Powers (II-II), a former slave who designed several quilts based on biblical themes. Her method for making these quilts is one called **appliqué**, in which fabric silhouettes are cut out and stitched onto the background of another fab-



II-10 *The Ardabil Carpet,* Iran, c. 1539–1540. Hand-knotted woolen pile, on silk warp and weft; 304 knots per sq. in. 34′ 6″ × 17′ 7″. Victoria & Albert Museum, London.

ric. Such an appliqué technique is common in West Africa and may have been passed on to Powers by her forebears. What she did with this medium, however, was quite unusual. Instead of making attractive patterns, Powers used the squares of her quilts to vividly illustrate stories from the Bible. In this quilt she told the stories of Jonah and the whale, Adam and Eve, and the Day of Judgment, among others. While her silhouettes are simple, their arrangements demonstrate her sophisticated sense of design. Each panel is both a clear and visually interesting picture.



11-11 Harriet Powers, *Bible Quilt: The Creation of the Animals*, Athens, Georgia, c. 1895–1898. Pieced, appliquéd, and printed cotton embroidered with cotton and metallic yarns, 69" × 105". Museum of Fine Arts, Boston (bequest of Maxim Karolik).

Wood

Wood has been used over millennia for many objects: simple containers, tableware, utensils, and furniture. Handcrafted wooden objects and furniture were common to the most modest homes in colonial America. Most of us have seen sturdy old wooden chests and tables in antique shops that have lasted more than a hundred years. Just being handmade, however, does not automatically make an object artistic or beautiful. The craftsperson must be sensitive in shaping materials, and in creating a design that is visually pleasing. Like other materials, wood can be used to create objects that are plain or extremely ornate.

The Aesthetic Movement, an arts-and-crafts movement in the last decades of the nineteenth century, established a deliberate goal of making the useful beautiful. In a reaction to poorly designed, mass-produced furniture, artists and critics in Britain and the United States began to call for more artistic and tasteful design. The elaborately detailed wood cabinet shown here (II-I2) is a superb example of furniture in the aesthetic style—meant to be beautiful, but not overwhelming or aristocratic. Designed for upper-middle-class homes and lifestyles, such pieces include carving and metalwork that suggest a Gothic inspiration, because the medieval period had come to be associated with fine craftsmanship. This particular cabinet, thought to have been designed by architect Frank Furness, was executed in the late 1870s by Daniel Pabst, a Philadelphia cabinetmaker.



11-12 Daniel Pabst, *Cabinet*, c. 1877–1880. Walnut, maple, white pine, glass, $96'' \times 42'' \times 20''$. Friends of the American Wing Fund, 1985. The Metropolitan Museum of Art, New York.

Combining walnut, maple, and white pine with metal hardware and painted glass, the entire surface is decorated in alternating patterns of deep relief (as in the rows of blossoms carved into the dark walnut) and shallow, inlaid panels of lighter pine incised in vine-like scrolls to reveal the reddish maple beneath. Despite the wealth of surface detail, the final effect is a harmonious melding of organic designs arranged in symmetric patterns and contained within a boxy, geometric shape.

THE STUDIO CRAFTS MOVEMENT

While many of the practitioners of contemporary crafts retain their love of material and continue to handcraft their pieces, they have also moved away from making functional objects. This direction toward the fine arts and away from the practical is called the *American Studio Craft Movement*. Beginning in the 1960s, craft artists in all media began exploring a wide variety of forms that refuse the functionality that had previously been seen as central to the very identity of crafts.

A leading figure in this movement from the 1950s until his death in 2002 was the ceramicist Peter

Voulkos. He influenced a whole generation with works created primarily for aesthetic interest, rather than for use. As a teacher in California, Voulkos began to make large clay objects that questioned the form of traditional vessels. For example, in his sculptured *Untitled Ice Bucket* (II-I3), he took a fresh approach to the traditional bucket shape, almost as if he were simultaneously constructing and deconstructing its form. As in Japanese **raku** (see the Global View box), whose aesthetic influenced Voulkos, the vessel bears the rough marks of the artist's process. We can see thick slabs of clay pushed together, the impressions of Voulkos's fingers left unsmoothed, the crude cuts of a knife. The bucket is now more like a Cubist sculpture than a container for ice.

Robert Arneson, a fellow Californian, was one of the most daring artists in breaking down the distinctions between contemporary ceramics and sculpture. His pieces are both filled with humor and totally nonfunctional, as in his self-portrait *California Artist* (II-I4). Putting himself on a shabby pedestal, Arneson is casually dressed in an open blue denim shirt that reveals a hairy belly. Far from an expression of an enormous ego, Arneson's piece mocks typical comments about Californians. Beer bottles litter his monument. If one gazes past his dark tan and into his sunglasses, one can see that his head is empty.



11-13 Peter Voulkos, *Untitled Ice Bucket*, 1986. Wood fired stoneware, 14.5" high × 19" diameter. Photo: © schoppleinstudio.com. Courtesy of the Voulkos & Co. Catalogue Project, www. voulkos.com



11-14 Robert Arneson, *California Artist*, 1982. Glazed stoneware, $68\frac{1}{4}" \times 27\frac{1}{2}" \times 20\frac{1}{4}"$. San Francisco Museum of Modern Art (gift of the Modern Art Council). Art © Estate of Robert Arneson/Licensed by VAGA, New York, NY



11-15 Marilyn Levine, *John's Jacket*, 1981. Ceramic, zipper, and metal fasteners. $36'' \times 23 \frac{1}{2}'' \times 7''$.

Marilyn Levine's humor is more subtle but also subversive. Her subject matter is unexceptional, utilitarian objects found in most homes. But the shock comes when the viewer realizes that a worn leather jacket (II-I5) is actually made of clay. Thus an honest approach toward materials, a hallmark of the crafts, is abandoned along with the old definition of functionality. Still, Levine's work reflects past concerns as well. It retains the traditional craftperson's love of material and care for making things well by meticulously recreating the colors and texture of worn leather. Her choice of mundane objects also reminds us of the roots of all crafts in everyday objects.

The American Studio Craft Movement in glass began with Harvey Littleton. He did not believe that crafts should be primarily functional or merely decorative, but could be the equal of abstract sculpture. Blue Crown (11-16) does not even pretend to be a functional vessel; it is a beautiful abstract sculpture of blown glass. Streamlined organic forms mark his work as a product of the modern era; transparent veils of color reveal its maker's love of glass.



11-16 Harvey Littleton, *Blue Crown*, 1988. Barium/potash glass with multiple cased colour overlays. Indianapolis Museum of Art.

The Studio Craft Movement affected the fiber media just as profoundly as in ceramics and glass. Imaginative new types of fiber objects have been made that cannot be categorized as wall hangings, baskets, or quilts, or any other traditional form. A fiber artist whose work has moved into the realms of sculpture, installation, and Earth Art is Magdalena Abakanowicz (II-I7). Her *Backs in a Landscape* hardly appears to be made of material at all, although

it was constructed with burlap and glue. Instead, these headless backs seem almost to have grown up out of the earth. Bent, anonymous, and decapitated, crowded together on a windswept plain, they seem to be awaiting their fate with a fearful resignation.

As with the other media, artists working in wood have sought to stretch the boundaries of their craft. In *Ghost Clock* (II-I8), furniture-artist Wendell Castle carved what appears to be a grandfather



11-17 Magdalena Abakanowicz, *Backs in a Landscape*, 1976–1982. Burlap and glue. 80 pieces, three sizes: 61 cm × 50 cm × 55 cm; 69 cm × 56 cm × 66 cm; 72 cm × 59 cm × 69 cm. © Magdalena Abakanowicz. Courtesy of the Marlborough Gallery, New York.

clock covered in a white sheet. Clearly, such a clock cannot be functional, or even decorative in the way that traditional clocks have been. Castle began his career as a sculptor, then moved on to create sculptural furniture. Even when his pieces are meant to be used, each is handmade and unique, carved from beautiful woods. Viewing this sculptural clock, one is immediately struck by the artist's skill, somewhat as in Bernini's ability to carve marble in *Apollo and Daphne*. At the same time, Castle's creation of a useful object that cannot really be used is reminiscent of Marilyn Levine's ceramic leather jacket. In *Ghost Clock*, however, the effect is mysterious rather than humorous. One itches to whisk off the cloth to see



11-18 Wendell Castle, *Ghost Clock*, 1985. Bleached Honduras mahogany, $86\frac{1}{4}'' \times 24\frac{1}{2}'' \times 15''$, Smithsonian American Art Museum, Washington, D.C.



11-19 Albert Paley, *Portal Gates*, 1974. Forged and fabricated steel, brass, copper, and bronze. Smithsonian American Art Museum, Washington, D.C.

the work beneath, but it remains forever out of our sight. In addition, the white cloth, shaped somewhat like a dress or an ancient toga, gives the piece an almost human (though headless) presence.

Although the Studio Crafts Movement has exerted a strong influence, not all craftspeople refuse to make functional objects. Some of the most talented continue to blend artistic expression with usefulness. The massive metal Portal Gates (11-19), created by Albert Paley for the Renwick Gallery, a division of the Smithsonian Institution devoted to American Crafts, are a remarkable example of how art and craft can be fused. Forged of steel, brass, copper, and bronze, the gates stand over seven feet tall and six feet wide, and weigh twelve hundred pounds. The heavy metals, however, have been shaped into a pattern of graceful curlicues that appears light, even fanciful. Paley was commissioned to build these gates toward the beginning of his career. In the intervening decades he has designed gates for numerous universities, museums, government buildings, zoos, homes, and even gardens, as well as freestanding metal sculptures. To honor his body of work, Paley is the only metal artist to win the Lifetime Achievement Award from the American Institute of Architects.

CONTEMPORARY APPROACHES IN CRAFTS

Since the Studio Movement that began in the 1960s, the craft media have been incorporated into the repertoire of painters and sculptors, and craftspeople have moved into the field of fine arts, until—in many cases—it is virtually impossible to tell the difference between ceramicists, woodworkers, metalsmiths, glassblowers, or fiber artists, and sculptors. Exciting new work in these media continues to challenge the distinction between art and craft.

Consider, for instance, the work of contemporary ceramicist Kathy Butterly, who creates miniature objects like *Yo* (11-20), measuring just a few inches across. Their tiny scale, bright colors, and whimsical forms (and titles) give her work a com-



11-21 Dale Chihuly, *The Sun*, New York Botanical Garden, 2006. Glass sculpture.



11-20 Kathy Butterly, *Yo*, 2004. Porcelain, earthenware and glaze, $5 \frac{1}{2}$ " $\times 3 \frac{1}{2}$ ", Tibor de Nagy Gallery, New York. Private Collection. Courtesy Tibor de Nagy Gallery, New York

pletely different feel than that of Peter Voulkos, for example. While Voulkos stressed the heavy materiality of the original clay from which all ceramics are made, Butterly's abstracted biomorphic forms seem to be created from a variety of materials. In this case, a golden base, a squishy, satiny body, a sponge-texture head, and a beak that resembles a dark seed combine to give the impression of a cartoonish toy chicken. Where Voulkos's *Hole in One* is rough and masculine, Butterly's *Yo* is delicate and amusing. Both artists are masters of their media while pushing its boundaries.

Dale Chihuly (II-2I) is the most famous and influential glassblower working in the United States—perhaps the world—today. Chihuly studied with Harvey Littleton, and then went on to experiment with multiple approaches to glass sculpture and to train a community of younger artists. Over more than three decades, he has created everything from personal-sized vessels to elaborate chandeliers to installations and performance pieces, and has been compared to Earth Artists like Christo. Chihuly's glass is noted for organic forms and vibrant colors, as in The Sun, an installation at the New York Botanical Garden from the summer of 2006. Each of the wild corkscrew curls is blown of glass and assembled into an explosion of warm color reflected in the cool blue of the pool. The work of art is not just the blown glass, but also the assembly and its placement outdoors, where its appearance constantly changes with the light and weather. Rather than imitating the



II-22 Myra Mimlitsch-Gray, *Melting Candelabrum*, 2002. Rotasa Collection Trust.

real world, Chihuly's glass sculptures seem to offer an alternate reality, a fantasy in glass where color, line, shape, and texture work together to create a unique, and powerful, aesthetic experience.

Metal artist Myra Mimlitsch-Gray also epitomizes the contemporary movement that combines exquisite craftsmanship with a sense of humor and history. Her Melting Candelabrum (11-22) is part of a series in which she simultaneously creates and critiques traditional domestic metalwork, "challenging and thwarting the viewer's expectations of familiar objects." In this piece, Mimlitsch-Gray shapes the expected metal candelabrum to imitate the melting wax of the candles it is designed to hold. Liquid silver seems to spread across the surface of the table, creating an organic shape punctuated by candleholders, several of which seem to have melted down to their bases. According to the artist, her work "is an exploration of traditional craft practice within a contemporary sculptural context that gives process a voice and explores gesture in rigid material."

In addition to many artists working in weaving, sewing, embroidery, and other textile arts, contemporary artists are also engaged in the transformation of basketry. Japanese artist Nagakura Kenichi creates stunning abstract works from fibers traditionally used for baskets. Kenichi's grandfather was an artisan who made flower baskets, and his own pieces can hold flowers as well. Works like High Flying (II-23), however, also hold up as sculptural compositions. Note the contrast between the tightly woven basket and the loose, curling strands of fiber that surround it. After the basket is formed, clay is sluiced over the surface, then wiped off, creating a texture that is

shiny on the ribbons where wiped, but dusty in the corners where bands twist and overlap.

As craftspeople have moved beyond traditional forms and into the realm of abstract sculpture in a wide variety of media, their work reflects a spiritual journey and mode of self-expression closer to that of "fine" artists than to the artisans of the past. In the contemporary world, it is usually designers, rather than craftspeople, who create the objects that we use in our everyday life, objects that are manufactured rather than handmade.



11-23 Nagakura Kenichi, *High Flying*, 2004. 12" × 8" × 10½". TAI Gallery, Santa Fe, New Mexico. Photographer: Mochizuki Akira, Japan.

DESIGN

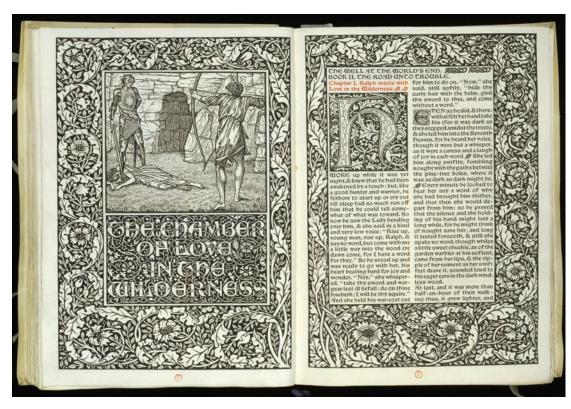
The products of design—graphic design, industrial design, interior design, and landscape design—furnish the artistic environment we live in every day. Artists, in the role of designers, have had a hand in or influenced the magazines we read, the pens we write with, the televisions we watch, the rooms we live in, and the parks we visit. A design must be useful to be successful. For example, a graphic design like an advertisement must communicate its message quickly or be a failure. We are much more forgiving of a work of fine art or even crafts; we accept that true understanding may be a time-consuming process. Since the late eighteenth century, more and more of the products we use have been mass produced, making the artist a partner with modern industry.

Graphic Design

Graphic design encompasses several types of design that were once referred to rather dismissively as commercial art. Advertisements, book illustrations, the layout of magazine pages, posters, packages, logos, and signs are all examples of graphic design, as is web design. **Typography**, the selection and manipulation of styles and sizes of lettering, is one of the basic activities of graphic design. Choices in typography

are rarely noticed by viewers who are uneducated in the graphic arts, but their effect can be considerable. Compare a double-paged spread from The Well at the World's End, written and designed by the prolific nineteenth-century artist, writer, and designer William Morris (11-24), with the pages you are now reading. Morris's pages are certainly more beautiful. Morris designed the elaborate type or letters and the decorative borders and made the illustration. Together these elements form an elegant harmony that evokes a time, centuries ago, in the early days of printing. Morris's approach is appropriate to a fantasy novel written in a medieval style (one that is believed to have influenced both C. S. Lewis's Namia saga and J. R. R. Tolkein's Lord of the Rings trilogy), but not to a contemporary college textbook. Imagine trying to read fifty pages of a text in the style of Morris! The designer of this book wisely chose a simpler and more direct typeface and design, one that would not interfere with communication. The look of the text is described as cleaner and more modern than Morris's, because its type is less elaborate and the spaces are more open.

In comparison with fine art, graphic design images are usually more direct and easy to understand. Although saying that one could look at a work of art all day is high praise, one would not want to have to stare for a long time at an advertisement or



11-24 William Morris, pages from *The Well at the World's End*, published by Kelmscott Press, 1896, Victoria & Albert Museum, London.

logo to guess its meaning. An image that can not only be read quickly but has become instantly recognizable is the *I Love New York* poster, designed by Milton Glaser. After 9/11, Glaser updated the "I Love New York" poster with this new version, *I (Heart) NY More Than Ever* (II-25), featuring a dark smudge on the corner of the heart. To anyone who experienced the tragedy of the World Trade Center, or saw it on television, this graphic image conveys an instant and effective message.

Industrial Design

In 1919, with great ambition and idealism, the architect Walter Gropius founded a school devoted to the cause of integrating the arts and modern technology and transcending the boundaries among craft, design, and art. He called it the Bauhaus (the house of building). This would be a school like no other, a training ground for men and women to make them capable of meeting the challenges of the twentieth century. Gropius declared at its opening:

Together, let us conceive and create the new building of the future, which will embrace architecture and sculpture and painting in one unity and which will one day rise toward heaven from the hands of a million workers, like the crystal symbol of a new faith.

In the new training ground of the Bauhaus, the old manner of academic education was abandoned. There were no professors and students. Those who came to study "joined" the school, and it was open to all ages, social classes, and both sexes. The academic plan was borrowed from the medieval guild system. Master artists and craftspeople, journeymen and apprentices worked together on projects in cooperation.

Gropius was a rare type of individual, a visionary who could also be pragmatic and persuasive. In the midst of hard economic times after World War I, he was able induce the German government to provide enough support so he could eliminate tuition at the Bauhaus by convincing the authorities that his goals were in line with the rebuilding of Germany. His teachers and students worked on government buildings, worker housing, furniture, and new products for industry.

The Bauhaus teaching stressed that all design must fit its purpose and contain nothing extraneous to it. Bauhaus solutions tended to reject older forms for a clean, modern, geometric, and simple style. The success of the Bauhaus formula is demonstrated by Marcel Breuer's *Club Chair B3* (II-26), whose modern design is still being manufactured, and imitated,



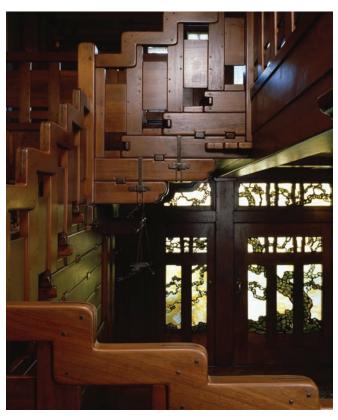
11-25 Milton Glaser, I (Heart) NY More than Ever.



11-26 Marcel Breuer, *Club Chair B3 (Wassily)*, 1925. Tubular steel and the textile Eisengarn, developed at the Bauhaus.

today. Breuer began as a student at the Bauhaus, but after graduation ran its carpentry workshop. This particular chair, the first to use tubular bent steel, is known as the "Wassily" because it was designed for painter Wassily Kandinsky, another member of the Bauhaus faculty. Breuer's chair is easily manufactured because of its simplicity. The chromed steel tubes slip into one another, so no screws and bolts are required. Even though the chair is made of hard metal and rugged fabric (designed by textile students at the Bauhaus), it is very comfortable because it flexes with the weight of the person sitting.

One might say that the Bauhaus created the modern field of industrial design, fabricating products that were aesthetically pleasing and capable of being mass produced. **Industrial design** is the aesthetic refinement of products, making functional engineering solutions easy to use and attractive. An industrial designer must understand both art and engineering. Marianne Brandt, like Marcel Breuer, was a student at the Bauhaus who later headed a workshop. Her simple *Table Clock* (**II-27**) of 1930, hardly looks designed at all, yet this one is in the collection of the Museum of Modern Art. With its straight hands, the hours indicated only by short lines (no numbers), plus its total lack of ornamentation, this clock looks familiar to us but was revolu-





11-27 Marianne Brandt, *Table Clock*, c. 1930. Painted and chrome-plated metal, $5\frac{3}{4}$ " \times $6\frac{7}{8}$ " \times $2\frac{7}{4}$ ". The Museum of Modern Art, New York.

tionary at the time. If you study it closely, you will see that Brandt also paid careful attention to proportion, readability, and style, rounding the edges of the square and setting the clock on a sleek chrome base. Other Brandt designs (or their descendants), like her bedside lamps, desk lights, and ceiling globes, are in homes throughout the world. Clocks like this one are still available, for example, although the central hole that would have been used to insert a wind-up key is now gone, since today's clocks are electric.

Interior Design

We tend to think of *interior design* as decorating: deciding on how to color and fill a room that has already been shaped. But interior design is also an integral aspect of architecture. When an architect designs any building, he or she is thinking as much of the interior as the exterior. The shape of the structure will determine the size and shape of the rooms. Some architects are careful to design every aspect of the buildings they create, including staircases, windows, light fixtures, and even furniture, curtains, and rugs. The Greene brothers (11-28) specialized in harmonizing their interior design with their architecture (see 10-27). Their *Gamble House* in Pasadena,

11-28 Greene Brothers, *Gamble House*, staircase, 1908–1909, Pasadena, California.

California, is decorated with built-in wooden cabinets, closets, and mantels, all with a beautiful hand-rubbed finish, highlighting rather than hiding the natural color and grain of the wood. Like a flowing river, the wooden banister is designed in a series of steps echoing the steps below.

The Art Nouveau interiors of Victor Horta were also inspired by nature, but European design of this period was more elegant and elaborate than that of the California Arts and Crafts movement of which the Greene brothers were part. Covered with flowing swirls and branchlike shapes, Horta's staircase for his own home in Brussels, Belgium (II-29), features wroughtiron handrails, walls painted with stylized white blossoms growing out of vertical white stems, and an airy glass dome to flood the interior with light. While the *Gamble House* staircase seems as massive as a tree trunk, Horta's is as light as a vine, reaching up to the sun.

The modern taste of the mid-twentieth century is revealed in the furniture showroom displayed by Knoll International in San Francisco in 1957 (II-30). Designed by Florence Knoll, this brightly colored interior appears far more pared down and functional than either the Greene Brothers or the Horta interiors. The sharp lines, simple shapes, clear colors, and subtle textures reflect the influence of modern style on items as diverse as pillows and ashtrays. Compare this room to a painting by Mondrian (see Chapter 16), and the relationship between decorative and fine arts will become evident. Not only is the furniture functional (with a clear Bauhaus influence), but the space is open, the colors bold, and the arrangement carefully designed for comfort and traffic flow.

Florence Schust had studied with Eero Saarinen. then worked for Walter Gropius and Marcel Breuer briefly before meeting visionary entrepreneur Hans Knoll during World War II. They began working together, formed Knoll Associates, Inc., and were married in 1946. The Knolls imagined a revolution in interior design to coordinate with modern architecture. Hans was the salesman while Florence (known as Shu) became the brains behind the Knoll Planning Unit, working to collaborate the designers hired by the company with the manufacturing plant in order to produce "well designed 'equipment for living' within the reach of a large consumer market," according to Arts and Architecture. She became an innovator in efficient office design, and created the showrooms that sold their ideas—and products—to the public. After her husband's death in an auto accident in 1957, everything from the furniture to the showrooms to the letterhead and business cards was controlled by Mrs. Knoll, according to one of their designers.



11-29 Victor Horta, *Horta House*, staircase, Brussels, Belgium, 1898.



11-30 Florence Knoll showroom in San Francisco, 1957.

Landscape Design

Landscape design, the alteration of the earth for aesthetic pleasure, is an ancient art practiced all over the globe. It is mentioned in the earliest hieroglyphics of the Egyptians. Gardens and parks were planned as sources of peaceful contemplation of nature by the Greeks, Chinese, and Muslims thousands of years ago. The ancient gardens, like the famous Hanging Gardens of Babylon, are known to us in legends only, but many magnificent gardens that are centuries old can still be enjoyed today.

The gardens of Versailles, once the private treasure of the kings of France, are now open to the public. Built in the seventeenth century, during the reign of Louis XIV (see Chapter 15), they are so grand and extensive that aerial photographs are required to show their length. The gardens are built around a main central axis nine miles long. A series of parterres or terraces lead down to the main axis from the palace. Each level has a fountain dedicated to a classical theme. Marble statues of gods and goddesses line all of the walks. The many landscape designers were fervent followers of classicism, the revival of the ideals of the ancient Greeks and Romans. Their plan and the actual plantings are very orderly and geometric and are meant to be an extension of the powerful domain of the king.

The key feature of the main axis is the Grand Canal (11-31), which extends for miles beyond what

your eye can see. At its head is the *Fountain of Apollo* (11-32). The god rides on a chariot drawn by horses leaping out of the water. In Louis XIV's day, the canal had a flotilla of miniature boats that were replicas of ships in his fleet. The boats and Venetian gondolas would take members of the court on gentle romantic cruises along the canal.

Crossing the main axis are a series of secluded paths that lead to more intimate groves designed to accommodate private romantic trysts. Each has its own fountain and theme. The gardens of Versailles had an important influence on landscape design. Their classical approach is used even today in the gardens of the wealthy and is known as the French style.

Isamu Noguchi, sculptor and designer, described his life as "a crossing where inward and outer meet, East and West." Born in the United States, he was the child of a Japanese man and an American woman. He studied in Paris with the abstract sculptor Constantin Brancusi (see Chapter 15). But his trip in 1930 to China and Japan was, according to him, a "discovery of self, the earth, the place, and my other parentage." While there he learned traditional Eastern methods of sculpting that affected his entire career. For most of his life, Noguchi had studios in both the United States and Japan. Many of his public sculptures and projects were for humanitarian causes. For example, moved by the destruction wrought by nuclear weapons, he designed two bridges for the city of Hiro-



11-31 Gardens of Versailles, 1669–1685, Versailles, France.

11-32 Fountain of Apollo, Palace of Versailles, France, 1672–1674.



shima in 1950. They lead to the Peace Park there, a memorial to the dead and a hope for the future.

His interest in the Japanese tradition of rock gardens (see the Global View box) is very apparent in his sculpture garden for the United Nations Educational, Scientific, and Cultural Organization (UNESCO) headquarters in Paris (11-33). It took him two years to complete. Individual sculptures made of stone (brought from Japan) exist harmoniously with plants and open spaces. A variety of textures and shapes become an appropriate symbol for the diversity of the United Nations, the mood of serenity the equivalent of its goal of peace. Noguchi said that he turned to garden design and natural materials to free humanity "from the artificiality of the present and his dependence on industrial products."

Here we come back again to the tension between humanity and industry, fine art and mass production. As we turn to the historical sections of this book, you will see how the art of ancient times evolved into the diverse and exciting global art of today. Your knowledge of the elements and principles of art, as well as the various artistic media, will help you appreciate both the ability of artists to create satisfying work using the elements of art and design shared by all visual artists, and their mastery of the tools and materials specific to each particular work of art. This knowledge will provide a foundation on which to build your understanding of the history of art.



II-33 Isamu Noguchi, *Gardens for UNESCO*, 1956–1958. UNESCO Headquarters, Paris, France.

Ancient Empires, Ancient Gods

n every region of the globe, art and artists have flourished within powerful empires and great civilizations. In eras when few people could read or write, art conveyed vital messages about authority and status. At times, the purpose of ancient art—like the prehistoric painting and sculpture we studied in Chapter 1—was to bridge the gap between the real world and the magical realm of the supernatural. Art gave visual form to gods and goddesses, enabling humans to express their inner beliefs and to focus their worship on specific images. Finally, ancient art attempted to satisfy a timeless human need—the hunger of each culture for visual beauty and majesty.

		PERIOD	HISTORICAL EVENTS	
	3000-1000 BCE	Cycladic Civilization on Greek Islands Egypt: Old Kingdom Middle Kingdom New Kingdom Indus Valley Civilizations Shang Dynasty in China Olmec Civilization in Mezoamerica	Reign of Akhenaton 1385–1358 BCE Reign of Ramses II 1292–1225 BCE Exodus of Moses c. 1250 BCE Destruction of Troy c. 1193 BCE King David c. 1000 BCE	
	1000-320 BCE	Ancient Israel: Period of the Kings Egypt: Late Period Homeric Age in Greece Classical Greece Olmec Civilization ends Roman Republic Zhou Dynasty in China	First Olympiad 776 BCE Confucius 551–479 BCE Siddhartha (Gautauma Buddha) preaches his first sermon 521 BCE Roman Republic founded 509 BCE Greek and Persian Wars 497–479 BCE	Age of Pericles and rebuilding of the Acropolis 460 BCE Death of Socrates 399 BCE Alexander the Great invades India 327 BCE
	320 BCE-330	Hellenistic Greece Ch'in Dynasty in China Roman Empire	Great Wall of China built 215 BCE Julius Caesar assassinated 44 BCE Marc Antony and Cleopatra defeated by Augustus 31 BCE Birth of Jesus 4 BCE Paper invented in China c. 100	Rule of Trajan, furthest expansion of Roman Empire 98–116 Emperor Hadrian 117–138 Constantine issues Edict of Milan tolerating Christianity 313 Constantinople becomes capital of Roman Empire 331

THE FIRST CIVILIZATIONS

When agriculture gradually replaced hunting as the source of human nutrition, what we call "civilization" began to develop. Fields were planted and harvested; permanent settlements grew up; and a surplus food supply allowed some members of society to take on specialized tasks as rulers, religious leaders, and artisans. Such cultures developed separately in several sites: between the Tigris and Euphrates rivers in what is now Iraq (c. 3500 BCE), in the Nile Valley of Egypt (c. 3000 BCE), in the Indus River Valley of India (c. 2500 BCE), and along the Yellow River Valley of China (c. 1700 BCE).

Culturally, what historians call civilizations are identified by having organized religion, calendars, systems for writing and recording, metalworking, and a tradition of fine and decorative arts. All of these features marked the three Mediterranean civilizations we will be discussing at length in this chapter—the empires of Egypt, Classical Greece, and Rome. The Mediterranean Sea links three

continents—Africa, Europe, and Asia—providing a crossroads for trade and cultural interactions. It was in this area that the most important cultures for the development of Western art came to life. At the same time, other areas of the globe were developing their own unique civilizations and cultures. Asia, Africa (below the Sahara Desert), the Pacific Islands, and the Americas each evolved their distinctive art forms—forms that had little impact on Western art before the mid-nineteenth century but had a major influence on modern art.

In the first civilizations, the artist's role changed from being a kind of priest creating magical images to a life devoted to preserving the power and recording the glory of leaders. It meant a loss of stature for artists, one that they would suffer for centuries. Once maker-magicians, they became anonymous craftspeople doing low-status manual labor. However, this does not mean their work was unimportant to the leaders they served. As Louis XIV of France said to his court artists, "I entrust to you the most precious thing on earth—my fame."

ART

Pyramids and Sphinx c. 2530 BCE





Cycladic Idol c. 2500-2000 все

Statue of Akhenaton 1375 BCE



Parthenon

Oueen Nefertiti с.1360 все



Olmec Head с. 900-400 все



Exekias vase 540 BCE



Polyklitos, Doryphous c. 450-440 BCE



Terra-cotta army of First Emperior of Qin c. 210 BCE



Augustus of Prima Porta





Colosseum 70-82



Shinto Shrine, Arch of Constantine Ise 3rd century c 312 - 315





Egypt

The new role for art and artists can be seen in the ancient Egyptian civilization that emerged along the fertile valley of the Nile River. Here artists worked in large studios near the royal palace, devoting their lives and skills to kings and queens. The studios were almost like factories, making standard images as prescribed by tradition. It was a powerful tradition; the Egyptian style remained similar for more than three thousand years. Artists preserved a continuous, recognizable tradition through thirty dynasties, showing their obedience to the long lineage of the pharaohs.

The role of the artist reflected that of all members of Egyptian society—servitude to the king, who was a god. Individual creativity was restricted to working within definite parameters. Individuals fulfilled their role as inherited by virtue of family and class. Their success depended on how well they served and obeyed the pharaoh.

The Egyptian focus on death and the afterlife (the so-called cult of the dead) is so well known that most of us associate Egyptian civilization with pyramids and mummies. Pyramids were the huge tombs constructed to protect the graves of Egyptian rulers, or pharaohs. Mummies were the bodies of the dead,

RT ISSUES

Preserving the Past: A Race Against Time

he late-twentieth century finds the art world in the midst of a crisis. The worldwide effects of pollution threaten our cultural heritage. Architectural monuments, outdoor sculptures, stained glass, and paintings are slowly but steadily being damaged by dangerous chemicals in the atmosphere. But it is not just our industrial world that is harming our landmarks; it is our curiosity. The prehistoric caves at Lascaux, France (1-10), were closed in 1963 because the breathing and perspiration of a constant stream of tourists (more than a million since its discovery) had resulted in mold growing on the paintings. Shocked experts watched as pictures that had been virtually undamaged for seventeen thousand years began to deteriorate quickly (surprisingly, when a replica of the caves opened nearby in 1983, it also became so crowded that visitors have had to be limited). The monoliths



12-1 *The Great Sphinx* (Pyramid of Kafre in the right background), Gizeh, c. 2530 BCE. Sandstone, 65' high, 240' long.

at Stonehenge, in England, are disintegrating from air pollution caused by hundreds of tour buses. In Mexico, emissions from oil wells are causing the Mayan temples of the Yucatan to crumble. The Leaning Tower of Pisa may finally collapse in twenty to thirty years if preservationists cannot find a way to shore up its foundations.

In Egypt, the Great Sphinx (12-1) guarding the pyramids has deteriorated more in the last fifty years than in all its forty-five hundred years. A portion of its right shoulder fell off in 1988. The head is the most damaged because, for many centuries, the Sphinx had been buried up to its chest in sand that protected it. However, because it is

elaborately preserved and encased in beautiful boxes, shaped and decorated to resemble human figures. Both the pyramids and the mummy cases are excellent examples of Egyptian art, but these tombs also contained sculpted and painted wall reliefs, figurines of people involved in everyday tasks, and the personal possessions of those who were buried.

Most of the Egyptian art that remains today is from the rich tombs of the kings. Some, like the Pyramids of Giza, are among the greatest structures ever built. These tombs were directed by master-builders under the command of the pharaoh who would be entombed within. During the months that the Nile

flooded its banks and made farming impossible, the people worked as a sign of faith in their king. King Chephren directed the building of the second pyramid at Giza. Also built during his reign was *The Great Sphinx* (12-1), carved out of rock found at the site, which stands guard over the city of the dead. Its face is that of Chephren himself, its body a lion. Nearly sixty-five feet tall, despite weathering over the centuries (see Art News box), it still expresses the almighty power of the god-king. No grander display of a ruler's supremacy has ever been constructed.

The Egyptians' preference for formality, even rigidity, in their portraits can be seen in the statue of

ART ISSUES

now entirely exposed to desert winds and air pollution, the limestone of the chest has begun flaking and crumbling to an alarming extent. Tour buses are no longer allowed to run their engines near the monument because of the fumes they give off. While there is no current danger, there has been concern that eventually the chest will be so weakened that the head may fall off. Even if the Sphinx can be saved, it is believed that Egypt has ten thousand other threatened sites.

The buildings of the Acropolis, over Athens, have had more than their fair share of troubles (see 10-9). Air pollution from the city is eating into the marble in a process that is nearly impossible to stop. Sulfur-dioxide fumes from burning heating and diesel oil combines with humidity and rainwater to form sulfuric acid. When the acid falls on marble, it bonds with it and makes gypsum. Whenever it rains, the gypsum is washed away, and another thin layer of the precious surface of the Parthenon (see 10-10) has been lost. Planes are now forbidden to fly over the Acropolis. Athens is trying to eliminate the use of oil for heating and to replace diesel public vehicles with electric ones, but that will take time. In the meantime, the remaining relief sculptures on the buildings are being removed to the safe, controlled environment of the Acropolis Museum. Concrete casts are being put in their place.

Another problem the Parthenon faces is the rusting of steel reinforcements imbedded in its marble as part of a restoration in the early 1900s. As the steel rusts, it expands and cracks the marble. Rain gets into the cracks and freezes in winter, splitting the stone. Pieces of ancient marble are falling off. The six thousand tourists a day (four million a year) at the Acropolis have had their impact, too. The marble steps are wearing away, forcing authorities to replace them with concrete or wooden walkways. Ancient inscriptions are disappearing, along with the old pathways. The Parthenon interior is now closed to visitors to protect it. The Greek government is facing a real dilemma. Tourism is its biggest industry, but the cost of repairing the Parthenon and the Acropolis (begun in 1986 and still underway) was estimated at \$15 million more than thirty years ago and is currently anticipated to cost \$90 million. The 1975 study itself cost \$1.6 million. UNESCO's International Council on Monuments and Sites is spearheading a worldwide effort to raise funds "to save cultural treasures, which, although they belong to the heritage of Greece, are also part of the shared inheritance of mankind."





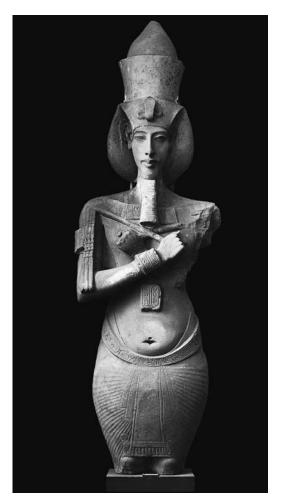


12-2 Mycerinus and His Queen, Kha-Merer-Nebty II, Giza, 2599–2571 BCE. Slate schist, 54½" high. Museum of Fine Arts, Boston.

the King Mycerinus and his wife Kha-Merer-Nebty (12-2). The stiffness of the poses, the symmetry of the faces and bodies, the staring eyes, and the angular outlines of the queen's elbow and the pharaoh's headdress all create a visual impression of solidity and strength. Both male and female figures represent not only individuals but also ideal male and female types. Compare the muscled torso and flat abdomen of the Pharaoh to the prominent breasts and pubic triangle of his wife (covered only by what appears to be a skintight, almost transparent shift). Such an emphasis on sexual characteristics was not meant to be pornographic, but symbolic of human fertility (see Global View box on Fertility Goddesses in this chapter and African examples of ideal male and female types, 9-17, 9-18). As in many Egyptian

statues, the rulers also represent gods: the female figure's image echoes the characteristics of Hathor, the earth goddess and Egyptian equivalent of Venus. It is believed that King Mycerinus commissioned many statues identical to this one to line the way to his pyramid tomb. This example was never finished (it lacks the usual inscriptions), but traces of color prove that it was originally painted. This early example of the Egyptian style (dated about 2600 BCE) provides a typical illustration of the way Egyptians preferred to see themselves immortalized as rulers and as gods.

Although the traditions of Egyptian art and religion continued for thousands of years, a notable break developed under the pharaoh Akhenaton (1379–1362 BCE). This revolutionary king attempted to introduce *monotheism*, or the worship of a single god, to the formerly polytheistic Egyptians. For this purpose he erected an entirely new capital with



12-3 *Akhenaton*, from a pillar statue in the Temple of Amen-Re, Karnak, c. 1375 BCE. Sandstone, approximately 13' high. Egyptian Museum, Cairo.

many altars for the proper worship of Aton, the Sun God. The sculptural portraits of this period look quite different than what we think of as the classic Egyptian style. Until recently, it was thought that the huge public portraits of Akhenaton—showing him with a narrow face, long nose, and full lips, as well as wide hips and a pot belly (12-3)—were meant to be more natural than past Egyptian sculpture. Current interpretations suggest that some of these characteristics, especially the swelling hips and belly, symbolize the ruler-God's melding of both male and female traits. Akhenaton's expression is often described as "dreamy" in comparison to the frontal staring of Mycerinus (a thousand years before) and Tutankhamen (a few years later). Instead of the stiff, angular outlines of previous Egyptian art, the statues of Akhenaton and his family feature long, sinuous, curving silhouettes.

This increased emphasis on both elegance and naturalism is seen in the beautiful portrait head of Akhenaton's wife *Queen Nefertiti* (12-4). This piece was actually an artist's model, a kind of sculptural sketch of the Queen on which more formal, finished statues would be based. In fact, the eye on the other side of the face is missing, which has been interpreted as deliberate—without the second eye, the image would not require worship, as a finished statue would.

Carved from limestone and painted to resemble flesh (as were most Egyptian sculptures and wall reliefs), this is undoubtedly one of the most popular examples of Egyptian art among modern viewers. Perhaps it is because the queen's long neck, small head, and dramatically outlined eyes remind us of a contemporary movie star or fashion model. Like a later and even more famous Egyptian queen, Cleopatra, Nefertiti has come to symbolize the idea that feminine beauty transcends time.

But the best-known example of the celebrity that art can bring to its subject and patron is that of the Egyptian pharaoh known to the contemporary world as "King Tut." Tutankhamen was a young ruler who enjoyed a brief, six-year reign over the Egyptian empire following the death of the pharaoh Akhenaton, his father-in-law. King Tut won no major battles, united no kingdoms, and built no cities (although during his reign the priestly class demolished Akhenaton's new capitol when a return to polytheism was ordered). Tut lives in popular imagination primarily because his was the only pharaoh's tomb to escape grave robbers until the twentieth century. In 1922, a British team of archaeologists



12-4 *Queen Nefertiti*, from Tell el-Amarna, c. 1360 BCE. Limestone, approximately 20" high. Ägyptisches Museum, Berlin.

unearthed the priceless treasure, which included the young monarch's mummified remains (encased in a triple coffin), as well as a trove of luxury objects that were buried with the pharaoh for his trip to the afterlife. When it toured the world in the 1970s, the exhibition of these objects drew huge crowds. King Tutankhamen's treasure had come to symbolize the mystery, power, and riches of the ancient Egyptian civilization.

Although viewers were fascinated by King Tut's golden throne and elaborate jewelry, the focus of the exhibit was naturally the coffin itself (12-5). The innermost chamber, which held the mummified body, is crafted of 450 pounds of gold inlaid with lapis lazuli, turquoise, and carnelian. It is not these precious materials but the exquisite workmanship, great age, and historical uniqueness that make Tutankhamen's mummy case priceless. Like the best Egyptian art, King Tut's golden portrait is formal, elegant, and reserved. The face has been simplified,

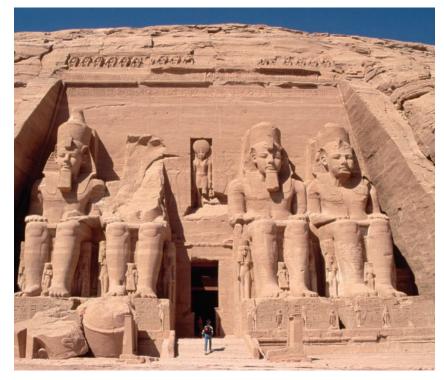
12-5 The second coffin of Tutankhamen (rule 1361-1352 BCE). Gilded wood inlaid with glass paste, 6' 7" long. Egyptian Museum, Cairo.



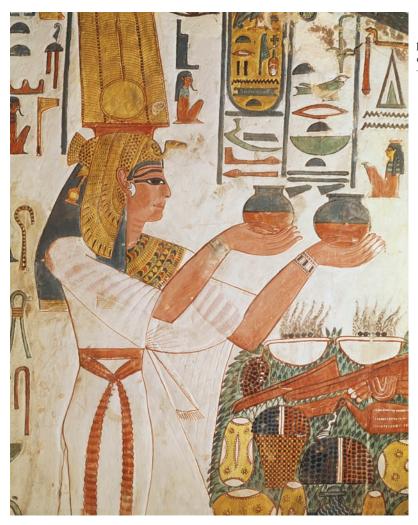
or stylized, into a smooth mask of power, reminding us that the pharaoh was identified with divinity. The design of the sculpted likeness is carefully balanced, conveying a sense of grandeur and permanence and immortality.

A hundred years after the reigns of Akhenaton and Tutankhamen, the great pharaoh Ramses II further extended the mighty Egyptian Empire, battling to enlarge its borders as far as what is now southern Syria. Traditionally identified as the pharaoh of the Exodus, Ramses demanded an even more powerful, formal style of Egyptian sculpture, as evidenced by the colossal statues of the pharaoh (sixty feet high) cut directly out of a hillside of solid rock (12-6). Dwarfed by Ramses' majesty, the workers whose labor built this monument must have felt literally crushed by its size and scale. (Although the Bible tells the story of Jewish slaves, modern historians believe these monuments were created through labor required of the Egyptian people and taxation.) These gigantic statues marked the entrance to an entire temple carved from the stone cliff, including two rows of colossal statue-columns.

But Ramses appears to have had a human side as well. Besides the temple glorifying his power as



12-6 Temple of Ramses II, Abu Simbel, 1257 BCE. Colossi approximately 60' high.



12-7 Queen Nefertari presenting offerings, wall painting from the tomb of Nefertari, Egypt, c. 1250 BCE. Painting on dry plaster.

a god-king, and his own tomb, the warrior pharaoh built a beautiful tribute to his favorite wife, Queen Nefertari (12-7). Although its walls were decorated more than three thousand years ago and its contents plundered, with a recent restoration, Nefertari's image is once again fresh and alive. Her tomb illustrates the bright colors and decorative quality of much of Egyptian art. In this painted relief of Nefertari presenting offerings to the gods, the queen almost seems to be dancing, her long fingers rhythmically curved. Like Nefertiti, Ramses' favorite wife wears an elaborate headdress and dramatic eye makeup. Earrings, a golden collar, and bracelets complete the picture of an elegant, pampered beauty.

Ancient China

The ancient Egyptians were not the only people to believe that their rulers would come back to life in another world, where they would require the assistance of their followers and continue to enjoy their earthly possessions. Along the valley of the Yellow River in China, there developed a mighty civilization greatly concerned with the ceremonial burial of the dead; the earliest dynasties actually buried living servants along with their dead rulers. China is the site of one of the most remarkable tombs ever discovered—a burial on the scale of the Egyptian pyramids but completely different in artistic style.

The Qin Dynasty of China (221–206 BCE) was the first to unite a large portion of the country under a single ruler. When the Emperor Qin Shi Huang was buried, his tomb was surrounded by more than ten thousand *life-size* figures, constituting an entire sculpted army, complete with horses and chariots. This great army was even arranged in precise order, as if prepared for battle; the ranks of the soldiers can be distinguished by their costumes and weapons. The scope of the project is overwhelming, yet each of the terra-cotta figures represents an individual

portrait of a real soldier, each was originally painted, and each carried an actual weapon. This mammoth testament to a ruler's belief in an afterlife—one in which he would need an entire army—indicates the power and wealth of the emperor during this period. The figures are evidence of the high quality of Chinese earthenware sculpture (12-8, 12-9). It is possible to find some of the names of the potters who made them stamped or engraved into the clay. These potters were able to mold clay to create surprisingly realistic portraits; the army is made up of different ranks and racial types.

THE CLASSICAL WORLD: GREECE

Greek and Roman art mark the beginning and set the standard for much of the later art of the West. Although ancient civilizations in Egypt, Assyria (see 9-3), and Asia also produced great art, these styles had much less effect on later Western art than did the Mediterranean styles of Greece and its cultural descendent, Rome.

Greek civilization was not limited to the area now occupied by the modern country of Greece on the mainland of Europe. The Greeks, or "Hellenes"



12-8 Terra-cotta army of First Emperor of Qin, Lintong, Shenxi, China, c. 210 BCE. Terra-cotta, figures approximately 5′ 10½" high.



12-9 Figures from terra-cotta army of First Emperor of Qin, c. 210 BCE.

as they called themselves, spread from their homeland across the Aegean Sea to the coast of Turkey. The Hellenic homeland was divided into relatively small states that competed with each other economically and sometimes politically. Despite their political fragmentation, the Greeks were united by their culture: a common language and religion, a sophisticated literature and art, and a love of athletics. Whether living in one of the city-states of the mainland or an island colony, the Greeks thought of themselves as civilized and the rest of the world as barbaric. They developed a rich mythology based on tales about gods and goddesses. According to Greek mythology, the immortal gods lived on Mount Olympus but often visited earth, interfering in human affairs and interacting with mortal men and women. Mythological and historical stories formed the basis of Greek literature and drama. The epic masterpieces of Homer, the Iliad and the Odyssey, along with the great plays of Aeschylus, Sophocles, and Euripides, attempted to understand the motivations of men and women by retelling traditional tales of Greek gods, heroes, and ancient rulers.

But the Greeks were not a blindly superstitious people. Their religion did not limit their quest for knowledge. The Western studies of mathematics, science, astronomy, history, and philosophy all began with the Greeks, who attempted to discover and understand the rules that ordered the universe. The great teacher Socrates reflected Greek attitudes in statements like "The unexamined life is not worth living" and "There is only one good, knowledge, and one evil, ignorance." His student Plato posed important philosophical questions about ideal government, truth, and beauty. Plato's student Aristotle was more practical, collecting data and formulating ideas based on his observation of natural processes. Yet he echoed Socrates' basic tenets when he said: "Educated men are as much superior to uneducated men as the living are to the dead." Greek thinkers placed a premium on logic and rationality. Their desire for clarity and order is also evident in Greek art.

The Classical Age

The Golden or Classical Age of Greek culture took place during the fourth and fifth centuries BCE. All of the arts—literary, theatrical, musical, and visual—flourished during this period. In open-air amphitheaters, the Greeks enjoyed the plays of great dramatists. Indeed, the Western world would not see such a convergence of genius again until the Renaissance

some two thousand years later. And just as the city-state of Florence was central to the development of the Italian Renaissance, so the city-state of Athens seems to have been most important in formulating what we think of as the ideal Grecian art and architecture. The accomplishments of this period are all the more remarkable because the height of Athenian power lasted only seventy-five years—from the defeat of the Persian Empire by an alliance of Greeks in 479 BCE to the Athenians' own defeat by other Greek states, led by the rival city of Sparta in 404 BCE.

The Athenians established a new kind of state—a democracy ruled by able citizens rather than dominated by the wealthy. This was the first example in the history of the world where concerned citizens shared in public political discussion and decision making. Although the Athenian experiment in democracy was marred by their acceptance of the institution of slavery and the limitation of citizenship to males, it has served as an exciting example to later, more democratic governments. As discussed in Chapter 10, one of the major accomplishments of this era was the construction of the buildings of the Athenian Acropolis after the original temples had been destroyed by the Persians. This project was directed by the Greek leader Pericles, the leading statesman of the time.

Of all the buildings constructed under Pericles, the most important was the Parthenon (10-12, 12-10). Loosely translated, the word Parthenon means "to the virgin," and this temple was dedicated to the virgin Athena, patron goddess of Athens. Within its columns, the Parthenon housed a magnificent, forty-foot ivory-and-gold statue of the goddess (12-11). The Parthenon is one of the most famous architectural wonders of the world and has come to symbolize Greek art and culture. Every aspect of the structure has been measured and analyzed; generations of artists have approached it as a shrine. For instance, the view reproduced here is from a painting by the great American nineteenth-century landscape artist, Frederick Edwin Church. Church had traveled to Greece to study this monument firsthand and had written back home in a letter: "The Parthenon is certainly the culmination of the genius of man in architecture. . . . Daily I study its stones and feel its inexpressible charm of beauty growing upon my senses."

In America, we are most familiar with places of worship where ceremonies take place inside; this was not true of Greek temples. The Parthenon

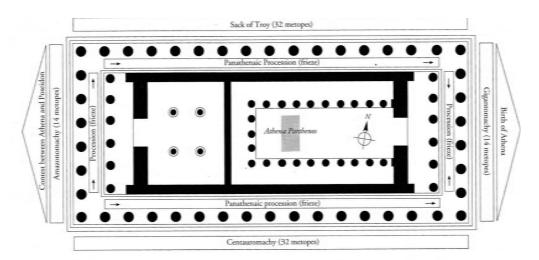


12-10 Frederick Edwin Church, *The Parthenon*, 1871. Oil on canvas, $44\frac{1}{2}" \times 72\frac{5}{8}"$. The Metropolitan Museum of Art, New York (bequest of Maria DeWitt Jesup, from the collection of her husband, Morris K. Jesup, 1914).



represents the ideal Greek temple, a religious shrine designed to face outward rather than to draw worshippers inward like a Christian church (12-12, floor plan of the Parthenon). The interior chamber, where the magnificent statue of Athena was reflected in a shallow pool of water, was open only to priests and priestesses of the cult. The statue might be glimpsed from the eastern doorway, but the space where religious rituals took place was outside at an altar placed in front of the eastern entrance. There religious processions would stop. Greek worshippers would gaze on the golden marble that rose up against the clear blue sky. Brilliant sunlight cast highlights and shadows on the fluted columns and the colorful painted marble statues that decorated the triangular pediments at either end of the roof.

12-11 Reconstruction of statue of Athena in Parthenon. Virtual model by Paul Debevec, 2004. Cella rendering from The Parthenon Project, www.debevec.org/Parthenon, ©2004 University of Southern California



12-12 Floor plan of the Parthenon.

GLOBAL VIEW AWorld Mountain for Worship

of the Greek and Roman empires in the Mediterranean region. The founder of the Buddhist faith was a Prince, Siddhartha Gautama (believed to have lived in the sixth century BCE), who turned his back on wealth and status in order to discover the reason for human suffering. After searching for years, he experienced enlightenment. The prince then became the Buddha, and taught that suffering is caused by desire, and that humans must free themselves from desire through meditation and right conduct in order to escape the endless cycle of pain. Instead of the self-indulgence of his early life, or the strict abstinence of his years of searching, the Buddha advocated a "middle way," in which humans attempt to let go of all attachment to the material world. Those who achieve this end attain nirvana. The Buddha lived the rest of his life as a teacher, while his closest followers became Buddhist monks and nuns.

With the spread of Buddhism in India came the development of a new religious architectural form that would greatly influence the Eastern world—the **stupa**. Jewish temples, Christian churches, and Islamic mosques are all based on a concept of worship familiar to most of us: A large, impressive building is dedicated to God, who is praised and prayed to by the people who gather within its walls. In contrast, the Parthenon was a temple whose worshippers gathered outside, in the open air. The concept behind a Buddhist stupa is even more foreign to most Westerners. A stupa is actually a mound and cannot be entered like a building. Instead, the Buddhist walks around the stupa in a clockwise direction. This walk symbolizes the Path of Life around the World Mountain, and the walking is a form of meditation and worship.

One of the earliest Indian stupas is *The Great Stupa* at Sanchi (12-13). This mound was finished in the first century AD. Originally it was covered with brick, then white stucco that was gilded. On the very top is a balustrade within which you can see a mast topped with a three-layered umbrella that symbolizes the three parts

A GLOBAL VIEW



12-13 *The Great Stupa*, Sanchi, India, third century BCE to early first century.

of Buddhism—the Buddha, the Buddhist Law, and the Monastic Order. Around the mound are a railing and four exquisitely carved gates. The sculptures on these gates tell stories about the Buddha or contain Buddhist symbols. Entering the gate, the pilgrim climbs stairs to a raised walkway that leads the worshipper on his or her journey. There is no statue of the Buddha at Sanchi; the burial mound itself is symbolic of the Buddha and his death.

Ironically, over the centuries, Buddhism became far stronger in the areas it spread to than it remained in India. *Borobudur* in Indonesia (10-9) includes fifteen hun-

dred stupas, and the whole monument also symbolizes "The World Mountain," as do the stupas themselves. In some regions, however, Buddhists built temples rather than stupas, as in the Byodo-in Temple of Japan (1-6).

Today, we can get an idea of how early gilded stupas might have looked in the *Schwedgon Pagoda* of Rangoon, Myanmar (Burma) in Southeast Asia (12-14). This particular stupa (the word *pagoda* comes from the term Portuguese traders in Asia used to describe stupas) was built hundreds of years ago, but (like the Ise Shrine in Japan, 10-28) has been rebuilt and renewed many times. It is now covered with gold, silver, and jewels—the umbrella at the top is encrusted with thousands of diamonds. This magnificent pagoda, surrounded by a forest of shrines, each with its own miniature golden tower, is almost 350 feet high. Perhaps its grandeur seems far removed from the original Buddha who renounced worldly pleasures in order to search for



the cause of suffering, but St. Peter's Basilica (10–37) may seem equally distant from Jesus of Nazareth, the simple carpenter. As we will continue to see, each religious tradition in the world has expressed itself in beautiful art and often demonstrates its faith and devotion in rich, expensive decoration.

12-14 *Schwedagon Pagoda*, Rangoon (Yangon), Myanmar (Burma), 14th century or earlier. Stupa, gold, silver, and jewel encrusted, approx. 344′ high.

The temple was simple in plan. Whereas the inner chambers have been destroyed, we can still see the row of columns, or **colonnade**, a kind of open porch that completely surrounded the inner rooms. These simple vertical columns support the horizontal lintels that held up the roof. Thus the form—posts holding up lintels (see Chapter 10–19), verticals supporting horizontals—is a clear expression of function, or how the building works. The structural skeleton of the temple is immediately apparent to the viewer; nothing is mysterious, hidden, or confused. The exterior design of the Parthenon is symmetrical, perfectly balanced. The Greek values of clarity, order, and unity are simply and powerfully expressed.

Yet the lines of the building are not perfectly straight. The columns swell gradually from their bases and then taper toward their tops (see 10-13). These slightly curved lines, lines that the human eye does not consciously perceive as curved, relieve the rigidity of the strict horizontal and vertical design, making it more visually pleasing and graceful. Curved lines give an organic, living quality to the structure. For instance, the swell of the columns has been compared to the muscular support of a human limb, like an arm or leg. The Parthenon is a perfect example of the melding of grace with strength, an ideal also expressed in the statues of Greek gods and heroes. Because the Greeks were great builders, they were able to construct the Parthenon with no mortar to hold the stones together. What appear to be solid marble columns are actually built out of marble drums, like round blocks, that have been fit one on top of the other.

It is interesting to note that the Parthenon as it appears today is rather different from that built and used by the ancient Greeks. Obviously, the temple is in disrepair, but other changes have taken place. The sculptures of the pediment were removed by the British Lord Elgin in the early nineteenth century (12-15)—now known as the Elgin marbles—and are housed in the British Museum. In addition, the sculptural elements on the temple were originally painted to look more lifelike so they could be more easily seen by viewers at the ground level.

Although we cannot see the Parthenon, or any Greek temple, exactly as the ancient Greeks meant it to be seen, historians, writers, critics, and tourists have all found in the remains of the Athenian Parthenon a spur to their imagination, a symbol of the very spirit of the Classical Age of Greece.

Classical Greek Sculpture

The Greek concern with balance, harmony, and proportion that we saw in the architecture of the Parthenon is also evident in their sculpture. However, when Greek statues represent the ideal beauty of the human form—youth, strength, grace—they do this by appearing more lifelike, or naturalistic, than statues of previous cultures such as the Egyptians. Greek sculpture and painting were based on a study of the human body, especially the nude athletic male. This is not surprising, because the Greeks believed that mental health should be balanced by physical exercise. The original Olympic games were part of a sacred festival open to Greeks from every state—in fact, the Greeks counted their history as beginning in the year of the first Olympiad (equivalent to our 776 BCE). Since the Greeks exercised and competed naked, it was natural for artists to represent them in the nude; the Greeks found nothing shocking about seeing people unclothed. In addition, for the Greeks, nudity was associated with both heroism and divinity.



12-15 *Three Goddesses,* from the east pediment of the Parthenon, c. 438–432 BCE. Marble, over lifesize. British Museum, London.

The Greeks tempered their admiration for athletic strength with an equal respect for youthful grace. They sought a perfect balance between body and mind, a natural harmony among muscular prowess, mental vigor, and physical beauty. For the ancient Greeks, ideal men (even more than women) could be seen as beautiful.

Unfortunately, very few Greek statues have survived in their original form. We are left, then, to make judgments about Greek sculpture from secondhand Roman copies. Still, this is perfectly appropriate, because these copies, not the Greek originals, had a profound effect on the artists of the Renaissance and later Western art. *Discobolos*, or Discus Thrower (12-16),

is a Roman copy in marble of a famous Greek statue by Myron; the bronze original was cast around 450 BCE, at the height of Greece's Golden Age. Here we see the athletic male in the midst of competition, yet he is not grunting or sweating. This perfect young man seems capable of great physical effort without any emotional strain; his face remains perfectly calm. This depiction fits the Greek ideal of dignity and self-control, a philosophy that became known as **stoicism.** What was unusual in Myron's statue was the dramatic motion and dynamic pose of the figure. Compare this to the rigidity of Egyptian statues, such as that of Mycerinus (12–2). The remarkable balance of the moving figure of *Discobolos* is a result of the precise moment selected



12-16 Myron, *Discobolos*. Roman marble copy of a bronze original of c. 450 BCE, life-size. Museo Nazionale, Naples, Italy.



12-17 Polykleitos, *Doryphoros*. Roman marble copy after a bronze original of 450–440 BCE, 6′ 6″ high. Museo Nazionale, Naples, Italy.

GLOBAL VIEW

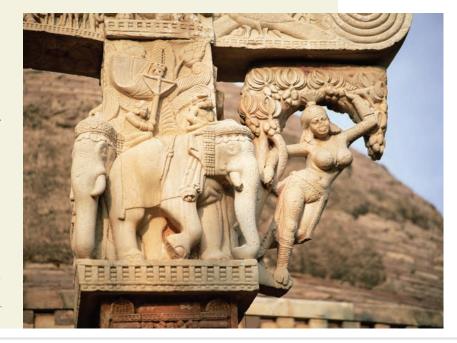
Fertility Goddesses

n Chapter 1 we looked at the *Venus of Willendorf*, carved about twenty thousand years ago, a tiny stone figurine in which the female sexual characteristics had been greatly exaggerated. Such early sculpture reflects a natural concern for human fertility and the continuation of the tribe, just as cave paintings were meant to magically ensure a supply of animals to hunt for food. Fertility goddesses continued to be worshipped by many early civilizations. It is not surprising that women, with their power of procreation, were associated with the creative forces in the universe. Throughout the ancient Middle East and Mediterranean basin, these overtly sexual goddesses were worshipped under many names: Ishtar (in Babylon), Astarte (in Syria), Isis (in Egypt), and Aphrodite (in Greece). Modern scholars refer to all of these as manifestations of a single powerful concept: "The Great Mother Goddess." Mother of the earth, she symbolized life forces and controlled the heavens, the seasons, and fertility for plants and animals as well as humans.

Today we are most familiar with the name the Romans gave to the goddess of fertility—Venus—but cultures from all over the globe have incorporated female fertility figurines into their religious art. In Indian art, the figure of a well-developed woman is known as a *Yakshi* (12-18). Originally part of a primitive system of beliefs, these Yakshis were incorporated into the decoration of both Hindu and Buddhist religious centers. The Yakshi illustrated here, for instance, is from a gateway of the Great Buddhist Stupa at Sanchi (see the Global View box, "World Mountain for Worship").

In Indian as in Greek art, there is no shame in showing the nude body, and Indian artists seem to stress even more the overtly sexual nature of their goddesses. With large breasts, tiny waists, and swelling hips, these represent an exaggeration of the female form as much as the Venus of Willendorf does. Notice also how the Yakshi

is shown intertwined with a tree—representing vegetation, or the fertility of earth. While we would never expect this seductive Yakshi to come to life, still the Indian goddess has a playful quality that seems to be lacking in the Western portraits of goddesses. The attitude toward divinity seems somehow less authoritarian, more joyful.



12-18 *Yakshi*, from the East Gate, *The Great Stupa*, Sanchi, India, early first century BCE.



12-19 Aphrodite of Melos, c. 150–100 BCE. Marble, approximately 6' 10" high. Louvre, Paris, France.

by the artist—the pause between the athlete's upward and downward motion.

Another statue of this period that had a great influence on later Western art is the *Doryphoros*, or Spear Carrier (12-17). Again, what remains is a much later Roman copy of a bronze original cast by the famous artist Polykleitos. The statue has not only lost its spear, but supports have been added in the form of a tree trunk and a brace between the thigh and the wrist. Nevertheless, we can recognize some essential qualities of Greek sculpture: the nude, athletic male; the graceful, natural stance; the well-defined muscles and understanding of human anatomy. Despite its pose of relaxed movement, the figure is shown as balanced and unified.

This statue is particularly important because it was known as the *canon*, which means measure or model. It exemplified, according to the Greeks, the most perfect and pleasing proportions for representing the human figure. Polykleitos was one of the most famous Greek sculptors; after his death, his name even came to mean "sculptor." Artists who followed him studied his ideas and abided by his perfect proportions.

Hellenistic Greece

After the classical period, Greek history and art entered what is called the Hellenistic Age. This period began with the age of Alexander the Great (356–323 BCE), when not only all of the Greek city-states were conquered and unified, but also an attempt was made to conquer the rest of the known world. Alexander, the student of Aristotle, reached as far as India, and although his empire was divided after his death, cultural connections between the subcontinent and the classical world began to flourish.

Greek sculpture became more naturalistic, more illusionistic, and more human during this period. The work of Praxiteles (1-17) and the Aphrodite of Melos (known commonly as the Venus de Milo, 12-19) illustrate how Greek sculptors made marble resemble flesh. Although she is missing her arms, the life-size Venus de Milo still illustrates the voluptuous charms of the Greek goddess. Not only are her breasts bare, but also her hips and abdomen. We can imagine this Venus breathing, moving, like a real person. These sculptures appeal less to the rational mind and more to the senses than the restrained works of the classical period. Also, during the Hellenistic Age, a more elaborate style of column gained popularity—the Corinthian order (see Chapter 10), which was topped with a capital of sprouting leaves.



SPAIN

250

0

By the second century BCE, Greek sculptors had begun to sculpt ever-more complex and dramatic figures that made bolder use of space. Two examples of this more exciting, less classical or restrained sculpture are the *Nike of Samothrace* (12-20) and the *Laocoön* group (12-21).

Nike means goddess of winged victory. Like so many ancient statues, this one no longer has a head, but the spirit of the piece is still evident. It shows the victory goddess landing on the prow of a ship. This



12-20 *Nike of Samothrace*, c. 190 BCE. Marble, approximately 8' high. Louvre, Paris, France.

portrayal of a moment in time, rather than a timeless universal, is one break with the classical past. Another is the sense of motion, the windswept drapery, the twisted lines of the costume, and the diagonals of the wings. The detailed rendering of the wet, clinging drapery is typical of Hellenistic sculpture, where artists attempted to make marble resemble both cloth and the flesh beneath it.

The Nike of Samothrace was carved about 190 BCE; the Laocoön group of the first century AD represents the ultimate in Hellenistic theatrics. It illustrates the story of a Trojan priest, Laocoön, who (along with his sons) was squeezed to death by sea serpents as a punishment for displeasing the gods. Compare the writhing, twisting figure of Laocoön to that of the earlier Discus Thrower—the expression of violent suffering on his face to the mask-like features of the Classical Age; we have come far from perfect beauty and harmony.

THE CLASSICAL WORLD: ROME

The city of Rome in Italy was the center of a second, and related, dynamic civilization that spread throughout the Mediterranean world. As early as the third century BCE, Rome had expanded and conquered Greek settlements on the boot of Italy, and by about 150 BCE, Greece had been annexed into the growing Roman Empire. In fact, the *Laocoön* was sculpted for Roman patrons after Greece had become a Roman province. During this early imperialistic period, Rome operated as a republic. The government was controlled by a small group of wealthy families by means of a senate and by officials elected from a small pool of eligible aristocrats and an electoral system heavily weighted toward the nobility.

Roman culture was modeled on that of the Greeks: Their gods were variations on the same theme; their literature imitated Greek poetry and drama; their art and architecture grew directly from Greek sources. Educated Greeks were often brought to Rome as slaves for the wealthy, working as clerks and teachers. Greek artists flocked to Rome, attracted by money and patronage, and created many of the surviving Roman copies of Greek statues. While the Romans absorbed their artistic ideals from the Greeks, they were more realistic than idealistic, more active than philosophical, more pragmatic than creative.

The Romans also contributed something unique to the world of Western sculpture, a tradition of



12-21 *Laocoön* group, first century BCE to first century. Marble, 8' high. Vatican Museums, Vatican State (partially restored).

realistic portraits. This school of portraiture developed in response to a specific need that related to Roman religious practices. Roman religion centered around the family and home, where busts of ancestors were given a place of honor. These were realistic and descriptive of all facial features, unattractive though they might be. Compare the Roman portrait busts (12-22) with the head of Hermes by Praxiteles (1-18), and you will immediately see the contrast between Greek and Roman art. It is inconceivable that the Greeks of the Classical Age would have commissioned such an unflattering image or would have wanted to keep it in their homes. Such unsparing portraits are typical of the virtues that Romans admired during the republican period: discipline, honesty, obedience, courage, strength, and frugality.



12-22 Funerary portrait of a Roman couple (formerly known as Cato and Porzia), c. first century BCE. Marble 27" high. Vatican Museums, Vatican State.

Imperial Rome

In 31 BCE, after a long period of civil wars (immortalized by William Shakespeare in Julius Caesar and by Hollywood in such epics as Cleopatra), Julius Caesar's great-nephew Octavius finally defeated his enemies in battle, and the Roman Empire was born. Given the title of Augustus, Octavius proceeded to consolidate his power. Although he never called himself emperor, he held dictatorial and imperial powers. For the next one hundred fifty years, Rome would be at peace, prospering and expanding, reaching the furthest limit of its rule. Eventually the empire would stretch completely around the Mediterranean, from Italy to Spain, through North Africa, the near East, Turkey, and Greece, and including all the islands in what Romans called Mare Nostrum or "Our Sea." Because of the Pax Romanus, or "Roman peace," it was possible for citizens to travel safely anywhere within



12-23 Augustus of Prima Porta, c. 20 BCE. Marble, 6' 8" high. Vatican Museums, Vatican State.

the far-flung empire. Roman legions also marched northward. Having already conquered Gaul (what is now France) under Julius Caesar, Rome expanded through the island of Britain to Hadrian's Wall, near the current border of Scotland.

The statue known as Augustus of Prima Porta (12-23) stood in the courtyard of the suburban Roman estate of Augustus's wife Livia. The posture is that of a victorious general addressing his troops, and the emperor is shown in armor. His breastplate is sculpted with scenes of Roman military triumph and the mythological figures of gods and goddesses. The pose of the figure is clearly based on the Greek model of the Spear Carrier (12-17), and the face shown is that of a handsome man in the prime of life. Here Greek idealization and Roman realism combine to create a convincing portrait of a "real man" and an effective image of the perfect leader. Looking down on his people with calm concern and complete selfconfidence, Augustus represents the "pater patriae," the father of his country. The historical scenes on his breastplate illustrate instances when his armies imposed peace on rebellious provinces. In works of art such as this, Augustus consciously attempted to identify himself with the ultimate authority of the state and the beginning of a new, Golden Age of Roman civilization. (A facsimile of the statue as originally painted can be seen in Chapter 2.)

Roman Architecture

Pomp and glory were needed to impress the masses, Roman citizens, and rival states. It was in architecture that the Romans found a medium most suited to their message. They adopted the language of Greek architecture—the Doric, Ionic, and Corinthian orders. They also borrowed the idea of the arch from the East (where it had been used primarily for drains) and exploited its possibilities to construct public buildings of great size, feats of ancient engineering. The emperor Augustus, who embarked on a major program of renovation in the capital, bragged that he had found Rome a city of brick and left it a city of marble. In addition, the vast imperial building program extended through all areas under Roman control, from Britain to the near East. Distant provinces of the empire were supplied with defensive walls, paved roads for the transport of armies and goods, aqueducts to supply fresh water to cities, and spacious public baths.

One of the most famous structures in Rome, symbolic of the city and imperial Roman architecture,



12-24 Colosseum, Rome, 70–82.

is the Colosseum (12-24). This huge arena (known to the Romans as the Flavian Amphitheater) is familiar to generations of American moviegoers because of its legendary association with gladiators and chariot races. To us, familiar with huge sports stadiums, the Colosseum looks almost ordinary, but in the Roman world it was a remarkable achievement. The use of the arch was key to the support of such a structure, which could not have been held up by the simple post-and-lintel system of the Greeks. Holding up to fifty thousand spectators, it was thirteen stories tall. The Colosseum was a gift of the imperial family to the people of Rome, offering free games as repayment for the fact that this area of the city had been taken from the people by the Emperor Nero (notorious for fiddling while Rome burned). The name referred to a colossal statue of Nero that stood on

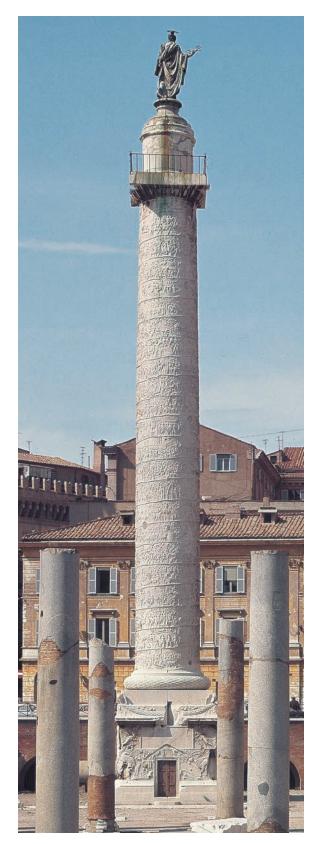
The purpose of the Colosseum was to house popular entertainments; for its opening in AD 80, the entire field was turned into an immense sea of water, in which three thousand participants staged a mock battle. Plenty of blood was shed here: As many as five thousand wild beasts might be slaughtered in a single day. Animals could be raised to field level from the cellars by means of a complex system of elevators. Gladiators were well-fed on a diet of red meat, which was thought to ensure that their blood would be bright red when it spurted out.

Aesthetically, the Colosseum makes a dramatic impression even in its present state of decay. It is like an illustrated essay on the three orders: the first story decorated with simple Doric columns, the second with more elegant Ionic columns, and the third by elaborate Corinthian columns. The columns and the lintels they support, however, are not integral to the structure of the theater—they are simply ornamental, because the weight of the walls is supported by round arches rather than slim columns. The arches served not only to support the structure, but also as convenient exits and entrances for thousands of spectators. Whereas the beauty of Greek architecture was based on honesty and simplicity, Roman architecture was meant to provoke awe in the viewer. In imperial Rome, the human scale of buildings such as the Parthenon was sacrificed to a kind of superhuman scale.

Later, when Rome was attacked by Gothic tribes, the Colosseum became a fortress. The iron bars that held the marble were melted down for weapons, and statues were hurled down at the invaders. But that would be after it had stood for almost four hundred years.

Organized Conquerors

The success of the Romans was based on the military might of their highly professional armies and the brilliance of their generals, as well as their powers of organization, their centralized administration, their efficient bureaucracy, and the huge tax base from their conquered territories. Above all, the Romans showed great political finesse, an ability to absorb many different peoples, races, religions, and cultures. One of the means by which Roman imperial authority was displayed was in official, public,



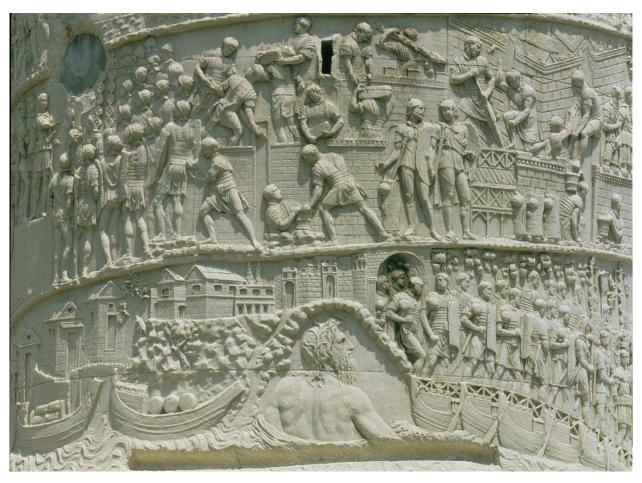
12-25 Attributed to Apollodorus, *Column of Trajan*, Rome, 113. Marble, 128' high.

and triumphant monuments, such as the *Arch of Constantine* (10–21). Another famous victory symbol of imperial Rome is the *Column of Trajan* (12-25). Trajan was a great general who ruled as emperor of Rome during the second century AD and the Roman Empire reached its greatest size during his reign. This column commemorates his two campaigns against the Dacians, which culminated in the conquest of the area that today still bears the name of Rome, Romania.

Erected in Rome in 113, the column established a format that would be used for centuries. More than one-hundred-fifty tightly packed scenes spiral up its height, reading like the scrolls that were once stored in the two libraries on the same site. At the base (12-26), a surprised river god meant to represent the Danube has turned to see the Roman armies crossing his river on a bridge they constructed. At the next level, the soldiers, after being addressed by Trajan, proceed to build fortifications. In fact, it is not battles themselves but the world-renowned engineering and organization skills of the Romans that are accentuated in the stories described. The overall atmosphere is one of calm, methodical planning succeeding over disorganized barbarians. The Romans march in orderly patterns, while the enemy's attacks seem confused; the Romans are clean-shaven, while the Dacians are sloppy and bearded. Trajan is always dignified and in control. Still, the Roman legions must fight long and hard as they move their way up the 125-foot column to ultimate victory.

The sculptor of this immense marble relief must have shared the Roman fascination with building, because precise details of constructions are seen throughout. Some believe that he was Apollodorus, the architect of the bridge over the Danube and other wonders of the ancient world. But even though the figures and backgrounds have many naturalistic details, real proportions are not used. Trajan is always larger than his soldiers, his armies always larger than any of the buildings. Size is related to the importance of the element in the story being told.

Inside the column, a long spiral staircase leads to a balcony at the top. In ancient times, one could walk up to pay homage to a bronze statue of Trajan and admire a beautiful view of the city he once ruled. Centuries later, a statue of Saint Peter was put in its place. Beneath Saint Peter's feet, in the base, are Trajan's ashes. It is, perhaps unintentionally, symbolic of the new church supplanting the once all-powerful pagan emperor and how time is the enemy that no one defeats.



12-26 Detail of Trajan's column.

Roman Temples

In addition to their use of the arch, the Romans developed the architectural feature of the dome. A dome makes it possible to span a dramatic space without columns or supports. But with the dome, as with the arch, we see a convergence of technical means with aesthetic considerations. In other words, the dome was not merely a useful feature; it was developed to be aesthetically pleasing as well. The most beautiful domed monument from ancient times, perhaps of any age, can also be found in the city of Rome—the *Pantheon*.

The *Pantheon* (12-27) was a temple dedicated to the worship of all the Roman gods and goddesses, as its name (*pan* means "all," *theos* means "god") suggests. This architectural wonder was begun under the emperor Hadrian (117–138), who may well have been its designer. The size of the huge dome was

never surpassed until the twentieth century. Hadrian held the empire together through hard work and strong character and was a great patron of the arts.

Looking at the Pantheon's façade, we immediately recognize Greek influence: it resembles the front of a Greek temple. Behind the rectangular porch, however, is a completely round building, or **rotunda**. The rotunda is topped by half of a sphere that, if it were continued, would just touch the floor of the building. In other words, the diameter of the rotunda is exactly equal to the height of the building at the top of its dome. Thus the space within the Pantheon is perfectly balanced, simply understood, and harmonious. At the very top of the dome is an open **oculus**, or eye, that permits a view of the heavens above.

The Pantheon, which has stood for almost two thousand years, is also a tribute to the engineering knowledge of Roman builders. Whereas the Greeks

12-27 *The Pantheon*, Rome, 118–125.



used solid marble to build their temples, the Romans exploited the potential of concrete as a building material. The dome of the Pantheon is designed of concrete that has been *coffered*; that is, squares have been cut into its surface. This coffering was not only part of the decorative scheme, but it also had the effect of lightening the weight of the dome itself (12-28).

To the eye, the dome appears so light that it seems to float over the rotunda rather than press down upon the viewer (12-29). On entering the Pantheon, one is overwhelmed by a sense of peace and visual satisfaction at the contemplation of its perfectly harmonious proportions. In Roman times, the ceiling was studded with bronze rosettes that looked like stars. For generations since, its refreshing



12-28 Interior of the Pantheon, Rome.



12-29 Dome with oculus of the Pantheon.

shade and cool stone have provided an escape from the hot Roman sun. Whereas the Greek temple was like a sculpture set in space, meant to be appreciated from the outside, the Pantheon is more like a frame enclosing three-dimensional space, a way of making empty space into the subject of the architecture.

Roman Painting and Mosaics

In addition to public buildings such as the Colosseum and the Pantheon, emperors, generals, and the upper class built expensive palaces complete with beautiful gardens and fountains. The gardens were filled with Roman copies of Greek sculpture, and the villas were decorated by wall paintings (see Herakles and Telephos, 5-1) and mosaics. Roman paintings in stone—mosaics—have stood the test of time better than delicate frescoes. One remarkable mosaic, made during the second century, is known as Unswept Dining Room Floor (12-30) because it represents the floor as it might have looked after a Roman banquet. The artist demonstrates complete mastery of the medium of mosaic, a medium that, like so many others, had originally been developed by Greek artists. A mosaic image is built up of tiny pieces, or tiles, of colored stone, ceramic, or glass, all fitted together in an intricate puzzle to form the desired



12-30 Sosus, *Unswept Dining Room Floor*, detail of later Roman copy of original Pergamene mosaic of second century BCE. Vatican Museums, Rome.

pattern or picture. Here small marble tiles are used in different tones to actually *model* forms three-dimensionally; cast shadows add to the illusion of reality, as does the little mouse nervously gnawing on some food in a small corner. But despite the surprising realism of the individual images, all the remnants of the meal have been designed to create a pleasing pattern against the pale floor.

The Decline of Rome

Mosaic or fresco, these examples of interior decoration were obviously designed to amuse a pampered upper class. Many contemporary observers felt that such aristocratic Romans had become decadent and had lost touch with the values that had enabled them to conquer and dominate so many peoples. As the Roman Empire entered its second century, the age of confidence was replaced by a time of troubles. Historians continue to argue over the reasons, but inflation became rampant and trade diminished. Rome was plagued with a swollen bureaucracy and urban riots. There were also military defeats at the borders of the empire—defeats by the armies of the Persians in the east and Germanic tribes in the northwest.

The violent clashes between Roman armies and invaders are preserved in the dramatic relief sculpture, *Battle of Romans and Barbarians* on the *Ludo*-

visi Battle Sarcophagus (12-31). (A sarcophagus was a stone coffin in which Roman aristocrats buried their dead.) Note the difference between the orderly Roman soldiers of Trajan's column and the writhing, twisting figures that crowd the surface of this stone box. Although the sculptors were still able to depict human figures convincingly, both Classical restraint and Republican realism have been abandoned. The battle shown here—probably against the Germanic tribes, or Goths—is violent, with gruesome corpses interspersed with the victorious Roman armies.

Between the third and fifth centuries, Roman culture was shaken, changed, and eventually overcome by three forces—the internal crisis described above, conversion to Christianity, and the Germanic invasions. The first two affected the spirit of the Romans, and the other the physical integrity of the empire. Christianity, an offshoot of Judaism, was originally condemned as an Eastern, mystical religion, and its followers were persecuted by the Romans. But, as the empire continued to crumble from within and to be attacked from without, Christian ideals began to appeal to the average Roman citizen. It was almost as if the entire empire experienced a communal spiritual crisis, a crisis of confidence. Early Christianity preached renunciation of the world and concentration on the promise of an afterlife—in opposition to the Roman ideals of practicality and public service.



12-31 Battle of Romans and Barbarians on the Ludovisi Battle Sarcophagus, from Rome, Italy, c. 250–260. Marble, approx. 5' high, Museo Nazionale Romano-Palazzo Altemps, Rome.



12-32 Medallion reliefs from the *Arch of Constantine*, 117–138, and Frieze from the *Arch of Constantine*, early fourth century. Marble, medallions approximately 80" high, frieze approximately 40" high.

The Christian church emphasized the spirit and condemned the desires of the body, in direct contrast to Greco-Roman ideals of physical fitness, health, and balance between body, mind, and spirit.

The Roman style continued to change in the three centuries after the age of Augustus. The technical skill of Roman sculptors declined, as is evidenced by the *Arch of Constantine* (12-32), constructed between 312 and 315. In the traditional Roman manner, this monument was dedicated to the most famous victory of Emperor Constantine the Great. What was not traditional was that much of the decoration for the arch was actually stolen from earlier monuments to emperors. There is a dramatic contrast between the naturalism of the older sculpted reliefs and the awkwardness of those created by the artists of the Age of Constantine.

The two circular medallions taken from the *Arch* of *Hadrian* illustrate the classical style of the height of imperial power. The figures are graceful and well-proportioned; they are shown in a variety of poses. The medallion at the left conveys the motion of a hunt, with realistic men on rearing horses, and the sculptor even suggests the texture of the wild boar's fur. On the right, an idealized, Grecian-style statue of a god stands on a classical base, and the sculptor is skilled enough to convey the difference between living figures and the immobile stone statue. Both medallions surround the sculpted forms with space

and arrange shapes in a pleasing and harmonious way within the round frame.

In contrast to these reliefs, which echo much of the Greek and Roman art we have looked at so far, the horizontal relief depicting Constantine addressing the Roman Senate below them seems childlike and crude. The figures sculpted in the fourth century are squat; their heads seem too big for their bodies. The figures seem to be crowded on top of each other without enough space to move. There is nothing left here of either realistic Roman portraiture or idealistic Greek beauty.

The classical elegance of the older medallions was not to be seen again for a thousand years, until the Italian Renaissance. Yet it would be wrong to see this change in artistic style merely as the result of a loss of talent or the ability to make art look real. In fact, this period is the birth of the Byzantine and medieval styles that would come to dominate Western art in the coming centuries. The Age of Constantine marks the beginning of a period when the symbolic content of a work of art became more important than its naturalism. These fourth-century relief sculptures therefore represent a changing vision, one that had not yet reached maturity. Superb works of art would eventually be produced in both the Byzantine and medieval style—art with a different aesthetic, a different purpose, but with no less power than the masterpieces of the Greeks and Romans.

The Age of Faith

	PERIOD	HISTORICAL EVENTS			
325-500	Decline of the Roman Empire Spread of Christianity through the Roman World Gupta Dynasty in India Shinto beliefs in Japan Germanic invasions of Roman Empire in the west Fall of Roman Empire in Western Europe	Constantine reunites eastern and western halves of Roman Empire 324–325 Constantinople becomes capital of Roman Empire 331 Emperor Theodosius declares Christianity the official religion of Roman Empire 391	Attila the Hun invades Italy 452 St. Patrick converts Ireland c. 475 Romulus Augustulus, Emperor of the Roman Empire in the west, deposed 476		
500-1000	Spread of Buddhism to Southeast Asia Early Middle Ages and feudalism in Europe Growth of Christian monasteries West African Kingdom of Ghana Spread of Islam across Middle East and Northern Africa Arab–Moslem golden age of art and learning Classic Mayan period in Central America Tang Dynasty in China	Justinian (527–565) attempts to reunite eastern and western Roman Empires Buddhism reaches Japan, sixth century Mohammed proclaims the faith of Islam, 611 Islam spreads into Spain 711–718	Beowulf composed, eighth century Charlemagne crowned Holy Roman Emperor 800 Viking raids throughout Europe, eighth through tenth centuries		
1000-1400	Medieval period in Europe Heian period in Japan Crusades expose Europe to art and culture of Middle East Romanesque Art Song Dynasty in China Mongol conquests Growth of towns in Western Europe Gothic Art West African Kingdom of Mali	Norman conquest of England 1066 First crusade 1095–99 Bernard of Clairvaux begins the transformation of the Cistercian order into one of the most powerful and influential monastic orders of the high middle ages 1115 Genghis Khan conquers vast empire in Asia 1162–1227	St. Francis of Assisi establishes Franciscan order 1209 Pope Innocent III calls the Fourth Lateran Council, reorganizes and reforms Latin Church 1215 The Hundred Years War between England and France 1337–1453 The Black Death begins to sweep Europe 1348 Chaucer, Canterbury Tales c. 1390		

onstantine the Great (272–337, emperor 306–337) was a uniquely important figure in the history of the late Roman Empire and Western civilization. According to legend, Constantine saw a miraculous cross in the sky before the crucial battle of the Milvian Bridge, commemorated in the triumphal arch discussed in the last chapter. After his victory, in 313 he declared Christianity legal and stopped the persecution of Christian believers; in 325 he made Christianity the official state religion of Rome. The remains of a colossal statue of the emperor from 330—its head alone is more than eight feet tall—suggest the direction that Western art will take in the centuries to come (13-1). Moving away from both the naturalism favored by the Greeks and the realism of early Roman portraits, *Constantine the Great* is presented with an awesome face. His huge, staring eyes seem all-seeing; it is an image not of a man but of absolute power.

ART

Colossal statue of Constantine c. 300





Seated Buddha Preaching the First Sermon fifth century

Christ as the Good Shepherd 425–450



Colossal Buddha 450-500



San Vitale 526-547



Book of Lindisfarne seventh century

Temple I, Tikal c. 732



Kailasa Temple eighth century

Dome of the Great Mosque at Cordoba 962–966





Warrior Columns c. 900–1180



Shiva Nataraja Lord of the Dance c. 1100



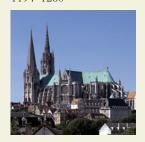
Unkei, Kongorikishi 1203

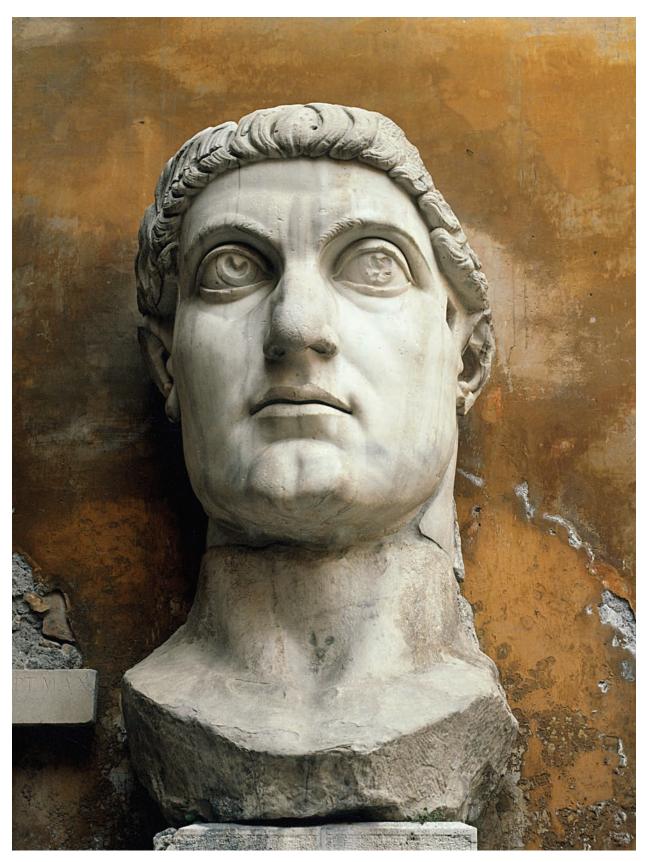


Pear-shaped vase twelfth-thirteenth century



Chartres Cathedral 1194–1260





13-1 Constantine the Great, c. 330. Marble, approximately 8' 6" high. Palazzo dei Conservatori, Rome.

Approximately one thousand years divide Constantine's conversion to Christianity from the Italian Renaissance. If Constantine had been the immortal he appears to be in his statue, he would have seen in those years the destruction of the western half of his empire but also the beginning of an age of faith, with his new-found Christianity coming to dominate Western Europe. The new Middle Eastern creed spread energetically, even beyond the boundaries of the former Roman state, eventually uniting a vast region from Iceland to Russia in the north and Spain to Turkey in the south.

At its southern and eastern borders, however, another vigorous Middle Eastern religion rose up to challenge Christian unity and dominance. Born in the desert lands of the Arabian Peninsula, and like Christianity heir to the Judaic tradition of monotheism, Islam expanded across the Middle East in the sixth and seventh centuries, sweeping westward through North Africa and up into southern Spain. Between the eleventh and fourteenth centuries, Moslem domination of the Christian pilgrimage sites in the Middle East, particularly the city of Jerusalem, led to a series of Crusades in which European Christians attempted to win back "their" Holy Land. Finally, in 1453, Moslems captured the remnant of Constantinople, the capital of the Eastern Roman, or Byzantine Empire founded by Constantine a thousand years earlier.

The same period also saw the Indian religion of Buddhism extend its influence throughout China, Southeast Asia, Korea, and Japan. In India itself, however, Buddhism waned due to a resurgence of the older Hindu religion. In this chapter, we will explore art made in the name of all these important faiths—Christianity, Islam, Buddhism, and Hinduism—in the years between 350 and about 1450, an era when religion replaced the political empires of ancient times as the primary unifying cultural force in most of Europe and Asia.

RELIGIOUS IMAGES OR SACRILEGE?

The idea that pictures of gods were sacrilegious is common to several world religions, at least in their earliest phases. Religions that have forbidden or limited the visual depiction of their god include Judaism, Buddhism, Christianity, and Islam.

The Buddhist reluctance to give physical form to the Buddha lasted several hundred years after his death in 483 BCE. Instead, Buddhism developed a variety of ways to indicate the Buddha symbolically without actually picturing a human figure. For instance, the lion and the wheel were used to represent the Buddha's royal blood. In the second century AD, this taboo against showing the Buddha as a person was broken, and statues of the seated, crosslegged Buddha became one of the most powerful and pervasive in all of art (see 13–19).

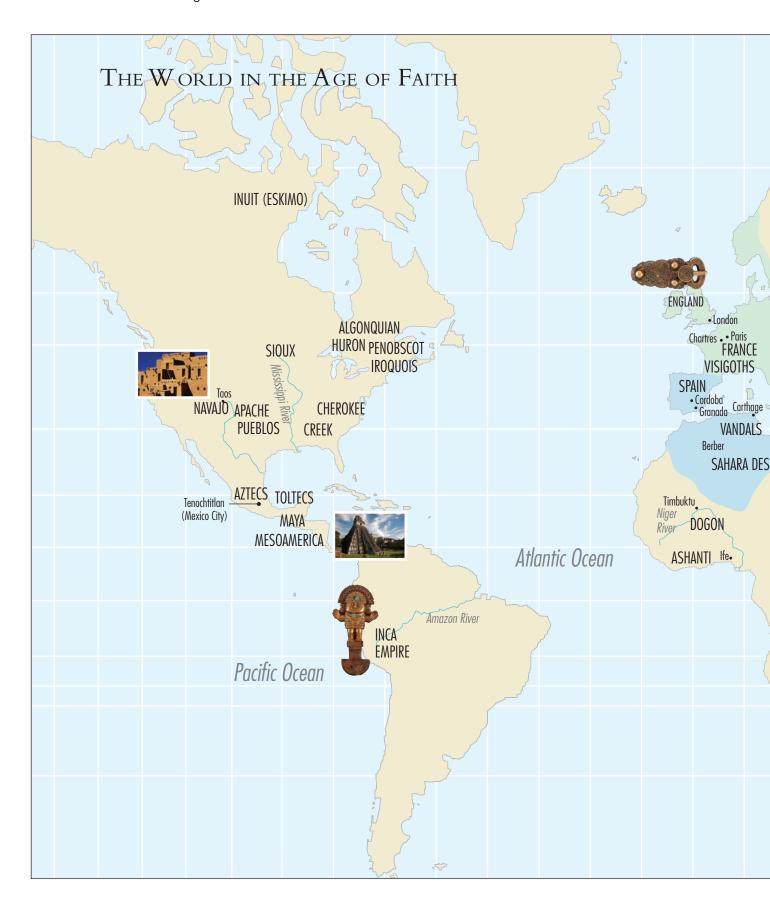
The Moslem faith retains to this day its objection to visual representations of Allah. In fact, early Moslems went further in forbidding the use of *all* images because they believed that the act of creation should be reserved for Allah alone. Thus, an artist who attempted to represent reality was a sinner against God and could have no hope of a heavenly reward. Much Moslem artwork, therefore, consists of decorative motifs, geometric or organic patterns (see *Shamsa*, 3–7) without any pictures or statues at all. Within these limitations their nonrepresentational decoration and calligraphy, as in this page

from a medieval Qur'an (13-2), achieved a remarkable beauty.

As an outlawed religion, early Christianity produced no architectural monuments, no important sculpture or painting. But even when Christianity



13-2 Qur'an manuscript, 13th–14th century, Nasrid (1230–1492). Attributed to Spain. The Metropolitan Museum of Art, Rogers Fund.





was established as the state religion of the Roman Empire, the early leaders of the Christian church felt that statues were too much like pagan images, and forbade their use in churches. The question of whether two-dimensional pictures, such as paintings and mosaics, should be allowed was the subject of much debate in the early church, a debate that was not settled until the sixth century, when Pope Gregory the Great finally decided in favor of the visual arts. He approved of painting and mosaic not for their beauty but for their instructional value, saying, "Painting can do for the illiterate what writing does for those who read."

EARLY CHRISTIAN AND BYZANTINE ART

Because they had no alternative artistic tradition of their own to draw from, early representations of Christ often show him as The Good Shepherd, a young man like the Greek god Apollo. A beautiful mosaic (13-3) done for the fifth-century Tomb of Galla Placidia, Empress of the West, melds late

Roman style and early Christian symbolism. Christ is shown as the shepherd of his flock. In one hand he grasps a cross, more like a scepter and symbol of power than a reminder of the suffering of the crucifixion. The other hand reaches out to caress one of his sheep, suggesting his role as protector and redeemer of humankind.

The tomb of Empress Galla Placidia is in the Italian coastal city of Ravenna, rather than Rome, because her brother, the emperor, had fled there in 410 to escape a series of barbarian attacks. Since 376, the western portion of the empire had fallen prey to a continuous process of invasion, starting with the outer provinces, then Italy, and finally, even Rome itself. By the time the last western emperor was deposed by a Gothic king in 476, the act was simply a recognition that the fall of the Roman Empire had already taken place.

In the eastern half of the empire, however, Roman art and culture survived. It was richer and better organized than in the west, better able to defend its borders or buy off its attackers. In *Christ as the Good Shepherd*, we can see signs that the Roman artistic style was changing to become less naturalistic, more stylized and symbolic. The plant shapes



13-3 Christ as the Good Shepherd, mosaic from the entrance wall of the mausoleum of Galla Placidia, Ravenna, Italy, 425–450.

are repeated designs, as is the pattern on the coats of the sheep. The art of the eastern half of the empire continued to develop in this direction, and the early Christian–Roman style eventually developed into a new artistic style known as **Byzantine**. Such Byzantine trends came to influence the west through the actions of Emperor Justinian, a remarkable leader and patron of the arts. In one final attempt to reunite the empire that had been divided in 395, the eastern emperor sent his armies to invade Italy in 540. Briefly successful, Justinian re–established imperial control in Ravenna. Though he never set foot in Italy, he directed a building program that would symbolize his authority. One result of this program was the remarkable church of San Vitale.

Decorated in 547, about a hundred years after the mausoleum of Galla Placidia, San Vitale contains some of the most exquisite and famous mosaics ever created. The simple, almost naive pictures of early Christian times became more courtly, sophisticated, and stylized, flatter but more decorative. The centerpieces of the decorative scheme were, on one side of the altar, the group portrait, *Justinian and Attendants* (13-4), and on the other, the portrait of Empress Theodora, with hers (13-5). Notice how much more two-dimensional these Byzantine-style figures appear than the late Roman-style Christ of a hundred years earlier. Like the earlier sculpted reliefs on the Arch of Constantine (12-32), they are arranged stiffly, facing front, their eyes locked on the viewer. Repetition with only minor variations is especially evident in the figures of Justinian and his courtiers; Theodora and her ladies appear sophisticated and elegant, with more diversity in their costumes. The artist seems to delight in the beautiful patterns of their rich robes, ignoring the anatomy of the bodies beneath them. Instead of using the medium of mosaic to give the illusion of reality, as we saw in the Roman Unswept Dining Room Floor (12-30), or the landscape behind Christ as the Good Shepherd, the Byzantine artist manipulates colored stones to create a sparkling and jewel-like effect. The liberal use of gold helps to give the picture an aristocratic and royal feeling.

While Justinian's group portrait shows the two arms of his authority, the church and the military, it was truly Empress Theodora who was his co-ruler



13-4 Justinian and Attendants, mosaic from the north wall of the apse, San Vitale, Ravenna, Italy, c. 547.



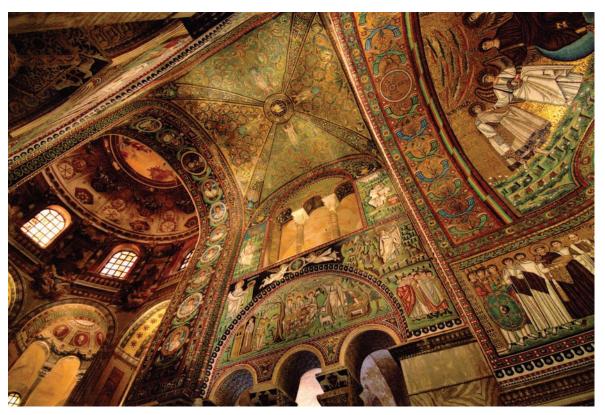
13-5 Theodora and Attendants, mosaic from the south wall of the apse, San Vitale, c. 547.

from the time he ascended the throne. The daughter of a circus entertainer and a former actress, she seems to have been a strong character and shrewd politician who was better able to make decisions and act in times of crisis than her husband. All of this—Theodora's imperious personality and personal power, the elegance and formality of the Byzantine court, the close relationship between the state and the church—is perfectly illustrated in these mosaic portraits.

The design of the building that housed these fabulous mosaics can also be used as an example of how architecture was changing. The rationality, logic, and order we saw in classical Greek and Roman architecture was not an appropriate setting for Christian ceremonies and rituals, which were meant to make the worshipper think of otherworldly mysteries. Unlike Greek religious ceremonies that took place outside of their temples, Christian services took place inside, away from the bustle of the world, in a place where the worshipper might turn his or her mind away from everyday life. If we compare the interior and exterior views of *San Vitale* (13-6, 13-7) to those of the *Pantheon* (12-27, 12-28), we immediately grasp essential differences between the Roman and Byzantine

style of religious architecture, between Roman pagan and Byzantine Christian beliefs. While the exterior of the Pantheon is symmetrical and awe-inspiring, San Vitale's is absolutely plain and somewhat confusing. The Pantheon is clearly based on geometric harmonies, clarity, and simplicity. While San Vitale's basic shape is also round and covered by a dome, the exterior is complicated and seems to sprout a variety of different-shaped appendages. The interior is also intricately divided, almost like a flower with its core surrounded by petals (13-8). Instead of a single, central source of light to illuminate the space, like the Pantheon's oculus, San Vitale's shadowed interior is lit by many small windows. Entering the Byzantine church, the worshipper senses that he or she has wandered into another realm, a world of the spirit. The interior glows with rich, multicolored marble inlays and mosaics.

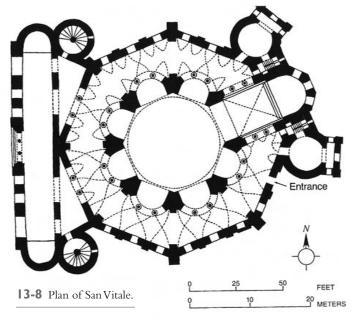
While Byzantine art continued to evolve in the eastern half of the empire over the next one thousand years, profoundly affecting the art of eastern Europe—especially Greece and Russia—the rest of Europe enjoyed only a brief exposure to the rule of the Byzantine emperor before another wave of Germanic invasions cut them off from the eastern empire.



13-6 Mosaic Interior of San Vitale, looking up, Justinian and Attendants at right, Ravenna, c. 547.

13-7 Exterior of San Vitale, 526–547.





THE EARLY MIDDLE AGES

The Germanic tribes who looted Rome and swept across Europe in the fourth and fifth centuries did not bring with them a culture with elaborate sculpture and architecture, well-established literature, or even a written language. Some of their names, like Goths and Vandals, remain even today associated with barbarians and thieves. The values they stressed were the characteristics needed to win in combat: courage and ruthlessness. There was no concept of loyalty to the state or nation, which did not exist. Instead, warriors (the aristocracy) gave their loyalty to individual warlords who had proven their valor in battle.

After a period of destruction—the looting of cities, burning of libraries—some of these tribes from the borders of the old empire began to settle in distinct areas. A tribe called the Franks settled in Gaul, which would become present-day France. The Angles, Saxons, and Jutes settled in Britain; the language of the Angles developed into English and gave us the name England. The art of these Germanic tribes was dramatically different from that of the Greeks, Romans, and Byzantines. These were migratory people organized in warlike bands, not wealthy aristocrats living in cities. Instead of temples to the gods, the Germanic princes built large wooden halls where they could feast and drink with their comrades. When the Angles and Saxons saw the ruins of great stone buildings left by the Romans in Britain, they imagined they were the work of a race of giants.

The art of the Angles and Saxons, like other Germanic tribes, did not depict the human figure at all. It was a decorative art of small, intricately patterned golden and jeweled objects. The Germans were great metalworkers and wonderful weapons makers; they

also used their skills to create elaborate jewelry. For the warrior-aristocracy, such treasure was both symbolic of their special status and prized for its own sake. The great Anglo-Saxon epic, Beowulf, tells us of their love for bright colors and precious metals, materials that gleamed and glowed. Such treasure had an almost magical fascination for them. Heroes like Beowulf wore rich golden buckles on their costumes and were buried with these ornaments as part of a pagan ritual. In the 1930s, the remains of an entire seventh-century Anglo-Saxon warship was found buried in England at a place called Sutton Hoo. The treasures unearthed there included an elaborate golden buckle (13-9) about five inches long, whose intricate patterning seems incongruous with its barbarian source. Three plain golden circles are interlaced with a fine web of serpents. The interwoven pattern and the theme of interlocking animals, especially serpents, is typical of the Germanic style.

Although Rome had ceased to be the center of the empire, it remained the center of the Christian church in the West. In 597, missionaries were sent by the pope to England to convert the heathen Anglo-Saxons. The conversion of the English to Christianity began a rich period of artistic production, especially the illustration of manuscripts. Book illustration had not been a very important artistic medium in the Roman world, but because the Christian New Testament was so central to the new faith, the decoration of the Gospels became worthy of the greatest effort. Elaborately decorated manuscripts were prepared in monasteries where monks devoted their lives to the glorification of God.

Lindisfarne (or "Holy Island"), on the English coast, was one of the earliest sites of an especially fruitful mingling of the earlier Irish or Celtic tradi-



13-9 The Golden Buckle of Sutton Hoo. Anglo Saxon, seventh century. Gold and enamel, 5 ¼" long. British Museum, London.

tions, the Anglo-Saxon artistic style, and the Roman-Byzantine. Two pages from the same book of Gospels, the Book of Lindisfarne of about 700, illustrate the dramatically different artistic styles being practiced at this time on the edge of what had once been the Roman world. In the page with an ornamental cross (13-10), we can immediately recognize the same interlaced decorative pattern of lines that the Anglo-Saxons used in their metalwork, in this case twisted dog-headed serpents and wild birds. Here, however, the formerly pagan design is superimposed with the shape of a cross—the most powerful symbolic shape in Christian art. Without sacrificing the amazing richness and complexity of the northern style, the artistmonk has brought order out of chaos by using the shape of the cross to organize the overall page.

The original of this artwork is only a little larger than nine by twelve inches. Think how different this is from the human scale of Greek art or the superhuman scale of Roman architecture! For centuries, people have been amazed by the delicacy, the imagination, and the fantastic detail of Irish and English manuscripts of this period. Some even thought the work must have

been done by angels. For the artist, producing the illumination was probably a kind of religious discipline, like fasting. To paint with such patience demonstrated an almost obsessive devotion and love of God.

In the same book, however, we find pictures of another type. These are portraits of the four Evangelists, or authors of the four Gospels. While the border surrounding *Saint Matthew* (13-11) matches the style of the cross page, the rest is typical of a surprisingly different style. It shows the figure of the saint sitting on a bench, writing his gospel about the life of Christ; above him is an angel. Since the northern tribes had no tradition of human portraiture, what was the source of this image?

Historians suspect that visiting monks from the Mediterranean world brought to Lindisfarne a gospel book or books in the Byzantine style. Notice the similarities between the figure of Saint Matthew and the mosaics of Justinian and Theodora. Although the mediums and sizes are completely different, the sharp lines of the drapery and the long, thin bodies certainly resemble each other. Still, Saint Matthew is not exactly like a figure in a true Byzantine manuscript or mosaic.



13-10 Ornamental page from the *Book of Lindisfarne* (Cotton MS Nero D IV f 26v), from Northumberland, England, late seventh century. Illumination, approximately $13'' \times 10''$. British Library, London.



13-11 Saint Matthew, from the *Book of Lindisfarne* (Cotton MS Nero D IV f 25v), from Northumberland, England, late seventh century. Illumination, approximately 11" × 9". British Library, London.

GLOBAL VIEW

A World Apart: Mesoamerica

n the other side of the globe from Eurasia and Africa, the Americas were evolving their own civilization and art forms. Independent of the "Old World," the "New World" developed agriculture, a calendar, a system of hieroglyphic writing, and a complex mythology. We have already seen one of the colossal stone heads (9-1) created by the Olmecs, an ancient American empire. The art and culture of the Americas before European contact is called Pre-Columbian (that is, before Columbus) or Pre-Hispanic (before the Spanish). During this period—lasting thousands of years—civilizations of the Americas rose and fell, conquered and were conquered in turn. Over such a vast area, spanning two continents, great variations in language, political structures, and society arose and were reflected in artwork.

Mesoamerica (present-day Mexico and Central America) became the site of the earliest known American civilizations to produce sophisticated arts, rivaling the monuments of Egypt, Greece, and Rome. The Pre-Columbian era in Mesoamerica has been divided into three periods: Preclassic (lasting from 2000 BCE to 300), Classic (from 300–900), and Postclassic (from 900–1500, or the European arrival). The Olmecs were a Preclassic civilization, thought to be the mother culture for all later Mesoamerican societies. Supported by a base of agricultural labor that produced a surplus of food (American corn, or maize, was the staple of their diet), they built towns housing rulers, priests, and artisans, where the people gathered for religious ceremonies at mounds or pyramids. Although we can admire their massive sculptures, we still know little about Olmec beliefs.

The Empire of the *Mayans* (300–900) is considered the Classic period of Mesoamerican art. Like the ancient Egyptians, the Mayans built impressive pyramids, but with a different purpose. These were not tombs but religious sites. The dramatic pyramids at Tikal (13-12) rise out of the Guatemalan jungle; a ladder of steep stone steps leads to a small temple that tops the structure. These pyramids were originally part of

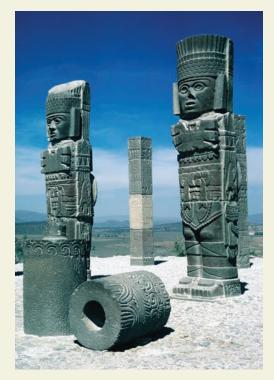
a huge plan, surrounded by open spaces, where peasants would come to witness religious rites performed by priests and rulers.

Mayan wall paintings, done in a fresco technique that developed independently in the Western hemisphere, show us these rites. Figures of fierce rulers or priests in animal costumes perform human sacrifices. It was believed that human blood was demanded by the gods in exchange for their gift of life to human beings. These practices were common throughout Mesoamerica for centuries.



13-12 Temple I, Maya, Tikal, Guatemala, c. 732.

A GLOBAL VIEW



13-13 Warrior Columns, Toltec, Tula, Mexico, c. 900–1180.

As the Mayan civilization declined, other Empires such as the Toltecs and Aztecs emerged in central Mexico. Like the Maya, the Toltecs built large pyramids, although theirs were wider and more horizontal. Atop The Pyramid of the Morning Star in their capital at Tula, they placed a series of fifteen-foot monoliths known as the Warrior columns (13-13). With their rigid stance and symbolic weapons (they carry darts and spear throwers), these statues both supported the original temple roof (like Greek columns) and served as guardian figures for it. Also like Greek columns, they are made of several blocks of stone set vertically, rather than carved from a single piece of rock.

The Toltec culture flourished from about 900 to 1180, after which Tula was abandoned and then destroyed (no one knows why or how). Rival city-states warred with each other for power until a band from the

North arrived and consolidated power. The Aztecs, who were still building power up to the time of the European contact and conquest, considered the Toltecs to be their ancestors. Calling themselves the "Mexica" (hence the current name for their nation), they in turn built temples and sacrificed victims (especially war captives) to the gods. They built their capital, Tenochtitlan, on islands across a lake, and its ruins remain underneath today's Mexico City (see Box in Chapter 14). Their main temple

was a pyramid symbolizing a sacred mountain (somewhat like Buddhist Stupas and Hindu temples). Aztecs actually had two calendars—a solar and agricultural calendar with 365 days and a religious or ritual calendar with 260 days. Every fifty-two years the calendars coincided and began a new cycle with special ceremonies. This famous stone calendar (I3-I4) was completed in 1479, shortly before the arrival of Columbus. Weighing twenty-four tons, it preserves a powerful image of a people who had no clue that their universe was about to be destroyed.



13-14 Aztec Calendar, Mexico, 1479. Museo Nacional de Antropologia e Historia, Mexico City, D.F., Mexico.



13-15 Interior of the Great Mosque at Cordoba, Spain, eighth to tenth centuries.

The drawing is stiff and awkward, more a collection of patterns than natural forms. This is partly because the artist is copying from another source, a source he considers sacred but does not really understand, never having drawn a human figure from life. During the early medieval period, monastic artists, like the philosophers and theologians, accepted the authority of the past. Christian monasteries attempted to preserve what was left of Roman culture by copying classical manuscripts as well as Christian works. This kind of copying from sacred texts, rather than working from nature, was the rule.

Islam

In the early 700s, despite the best efforts of the powerful emperor Charlemagne, Spain was conquered by Islamic invaders from North Africa. In most of the Spanish Peninsula, Moslem culture—and art would flourish for the next seven hundred years. The religion was founded by the prophet Mohammed (570-632), who lived on the Arabian Peninsula; it spread through the Middle East with amazing rapidity. The teachings of Mohammed are recorded in the Qur'an, which tells of the revelations of God through the angel Gabriel. The name Islam means "submission to the will of God." The Moslem religion stresses five duties: (1) belief in one God and his prophet, Mohammed; (2) praying each day at appointed hours; (3) charitable giving; (4) fasting during the daylight hours in the holy month of



13-16 Entrance to the mihrab, Great Mosque, Cordoba, Spain, 962–965.

Ramadan; and (5) making a pilgrimage to Mecca, the birthplace of the prophet, once in one's lifetime.

Like the Jews, Moslem Arabs were originally a nomadic, desert people who had no permanent architecture. Eventually, Islamic architecture developed its own particular shape: a rectilinear, walled space with an open courtyard in the center. The main axis of the building was oriented to face in the direction of Mecca, the holy city, and this direction

was visually emphasized by a **mihrab**, or niche. This niche, which was often elaborately decorated, fulfills a function similar to that of the altar in a Christian church, as a focal point for worship.

As discussed earlier, there was a ban on representational art but a love of pattern in Islamic art. This is beautifully illustrated by the *Great Mosque* (temple) in Cordoba, Spain. The interior space is marked by a rhythmic repetition of columns and arches (13-15); the original area was built in the late 700s. After three more periods of construction, ending around the year 1000, the mosque had quadrupled in size. The visual effect of these multiple columns—more than five hundred in all—is like that of a magical forest. Because the spaces above the arches are open, the effect is far more light and airy than Roman buildings.

The elaborate mihrab and dome above it were completed in the late tenth century, when Cordoba had become a major Islamic city. The arched doorway marks the niche (13-16); the exquisite golden dome (13-17) is located in the chamber in front of the niche. Constructed of marble, stucco, and mosaic, all materials and patterns are fused into an incredibly rich design that is also harmonious and orderly. The other unique architectural feature of the Islamic mosque, the **minaret**, is well-illustrated by the exterior of the *Hagia Sophia* (13-18), a remarkable Christian church that was transformed into a mosque after the capture of Constantinople by the Moslem Turks in 1453.



13-17 Dome near the mihrab, Great Mosque, Cordoba, Spain, 962–966.



13-18 Anthemius of Tralles and Isidorus of Miletus, Hagia Sophia, Constantinople (Istanbul, Turkey), 532-537.

Originally built by Justinian in the early sixth century, about the same time as San Vitale, the Hagia Sophia was the most famous and dramatic church in the capital of the eastern Roman Empire. Influenced by Roman architecture, the church was topped with a huge dome. To change the magnificent structure from a church to a mosque, the new rulers of Constantinople (which they renamed Istanbul) simply removed all of the Christian mosaics and added four delicate minarets—slender towers with balconies from which believers are called to daily prayer—at the building's corners. This combined style of a central dome flanked by minarets then became a new model for Islamic architecture.

Buddhism

As described in Chapter 12, Buddhism was founded by Siddhartha Gautama, a prince from Nepal who lived in the sixth century BCE. In his search for the meaning of life and the reason for human suffering, the Buddha experimented with a number of paths to enlightenment and experienced many adventures and temptations. Through the revelation that all life is an illusion, and the only way to escape pain is to renounce all desires, the Buddha was able to escape what Hindus believed was the endless cycle of life, death, and rebirth and attain **nirvana**, a state of endless bliss.

One of the classic representations of the Buddha is the sculptural depiction of Seated Buddha Preaching the First Sermon (13-19) from the fifth century. Every element is symbolic. The Buddha is seated like a yogi, or Indian holy man. A beautifully carved halo is behind his head. The position of his hands is known as the teaching gesture, also called "turning the wheel of the law." Around him are the symbols we saw in the Lion Capital, the wheel of the law behind and stylized lions on either side. Certain features, such as the elongated earlobes from heavy earrings and the stylized arrangement of the hair, show that the Buddha was once a noble Indian prince. The statue balances such finely carved details against smooth, undecorated expanses of stone. The quiet, harmony, and idealization of the figure contribute to a sense of repose, as do the downturned eyelids and calm smile.

The classic figure of this Indian Buddha underwent many transformations as the religion spread throughout Asia. For instance, the dramatically different *Colossal Buddha* from China (3-18) was hewn out of rock at about the same time as the Indian



13-19 Seated Buddha Preaching the First Sermon, from Sarnath, India, fifth century. Stele, sandstone, 63" high. Archeological Museum, Sarnath, India.

statue. The Japanese Amida Buddha (1-6) is more elegant and aristocratic. Buddhism traveled not only east to China and Japan but also into Southeast Asia. The Walking Buddha of Thailand (13-20) was done about a thousand years after the Indian Buddha from Sarnath. This figure represents the Buddha in his role as missionary—a fitting role, considering the vast spread of Buddhism from its original base. The bronze sculpture is more than life-size. Its utterly smooth surface and sinuous curves are typical of Thai art (compare him to Rodin's Walking Man, 9-15), and its ideal beauty is described by Thai Buddhists as "arms like the hanging trunk of an elephant." In a way utterly unlike Western art, particularly religious art, the essence of both sexes is reflected in this image of divinity.



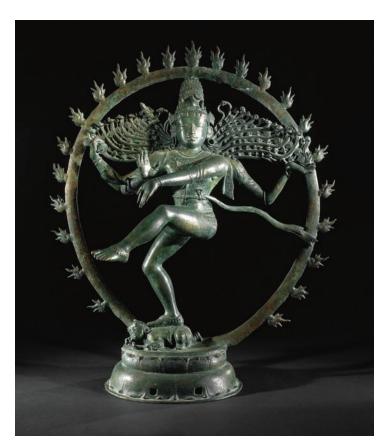
13-20 Walking Buddha, fourteenth century. Bronze, 88" height. Monastery of the Fifth King, Bangkok, Thailand.

Hinduism

Like Judaism, Christianity, and Islam, Buddhism and Hinduism are also related religions. Hinduism is an earlier system of beliefs, an ancient religion native to India. Hindus believe that humans are fated to experience an unending cycle of birth, life, death, and rebirth, known as reincarnation. The final goal of this cycle is oneness with the absolute, or the Supreme Being, who is present in the world in innumerable forms. The concept of *karma* determines one's fate: the deeds of one lifetime influence one's status in the next. This idea is reflected in a rigid caste system, where one's social status is absolutely determined by birth into one of five castes, or classes: priestly, warrior, producer, menial, and untouchable.

Hinduism is polytheistic, incorporating many major and minor deities. However, the most important god is a threefold divinity: Brahma, the Creator; Vishnu, the Preserver; and Shiva, the Destroyer. This god includes within itself several opposing concepts: light and dark, birth and death, beauty and ugliness, good and evil, male and female. Because the idea of destruction carries within it the seeds of its opposite, rebirth and reproduction, the god Shiva has many faces, from fierce destroyer to calm and caring preserver. His most famous role is that of Shiva Nataraja, Lord of the Dance (13-21). The dance of Shiva symbolizes the most powerful forces in the universe, the rhythm of creation, conservation, destruction, and liberation. In this incarnation he is shown surrounded by a halo of fire that represents the universe; his long hair streams out like wings on either side of his head as he dances. This fine bronze sculpture was made in the eleventh century and demonstrates that Indian artists excelled in metalwork as well as stone carving. The figure appears both strong and graceful, dynamic and balanced, reflecting the contrasting forces typical of Hindu beliefs.

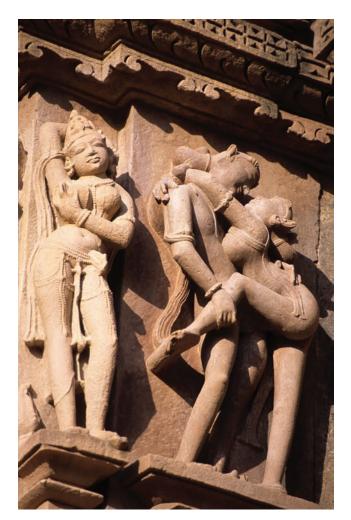
Hindu religious architecture is not so much constructed as carved, and the temples are often said to



13-21 *Shiva Nataraja, Lord of the Dance,* India, c. 1100. British Museum, London.



13-22 The Jagadambi Temple, Khajuraho, India, c. 950–1050.



13-23 Celestial deities, Jagadambi Temple, Khajuraho, India, c. 1000.

be more like huge, complex sculptures than architecture. One dramatic example is the temple at Ellora, which is completely carved out of a mountain (see 9-14). Other Hindu shrines, such as those in Khajuraho, India, were built to resemble mountains. The Jagadambi Temple (13-22) is one of what were once more than eighty temples built around the year 1000 by the Chandela dynasty. Later hidden in the jungle and lost for hundreds of years, this magnificent complex was rediscovered in the twentieth century and now includes the remaining twenty-two structures. The Western group, including the Jagadambi, were named a World Heritage Site by UNESCO in 1986. The Khajuraho temples are considered to be the finest example of the northern Indian style of architecture, and sculpture, for the medieval period. Constructed on platforms, these temples rise vertically, but in a series of horizontal layers, with towers echoing the foothills and higher peaks of the Himalayas.

Perhaps the most startling aspect of Hindu art to Christian (or Moslem) eyes is the incorporation of the theme of sexual pleasure into places of worship. We have already seen the voluptuous Yakshi who adorned the Buddhist stupa at Sanchi (12–19); her image was related to native Indian fertility rites. However, the exterior carvings on the Jagadambi Temple (13-23) go beyond the realm of the voluptuous and into that of the erotic. Rather than rejecting the body and sensual delights, Hinduism incorporates the worship of the youthful human body. Sexual pleasure becomes a symbol of the union of the human with the divine, not a source of guilt or shame.

THE MIDDLE AGES

How different was the attitude toward the human body and sexuality during the early Middle Ages in the West! The art of the early Middle Ages appears almost obsessed with the ideas of death and sin. The vears between 850 and 1000 were a dark period for the arts in most of Europe. The second wave of invasions disrupted cultural and economic recovery. People found little comfort on earth and concentrated on the prospect of their heavenly reward—or the fear of eternal damnation. One work of art that seems symbolic of this period is a panel from the magnificent bronze doors of the church of Saint Michael's in Hildesheim, Germany, Adam and Eve Reproached by the Lord (13-24). This illustrates the Old Testament story in which God discovers that Adam and Eve have disobeyed him and eaten from the Tree of Knowledge, committing humanity's "original sin." God, on the left, seems to convict Adam with the pointed finger of condemnation. The cowering Adam passes the blame on to Eve, who tries to hide her nakedness and point to the serpent at the same time.

A comparison of Adam and Eve to any Greek or Roman nude statue immediately illuminates the change from classical to medieval artistic styles and cultural values. In the Hildesheim doors, cast in 1015, humans attempt to hide their spindly, naked bodies before God. They are ashamed to be nude. These bodies show none of the ideal beauty or athletic grace of Greek and Roman statues, and certainly none of the sensual delight of Indian carvings. This is not simply because the medieval artist is unskilled—on the contrary, the crafting of these great bronze doors was a complex project that took tremendous artistic talent. But the message of the art is anguish and guilt rather than pride and confidence, and thus calls for a new style.

The Romanesque Style

By the time the great doors at Hildesheim were made, northern Europe had begun to recover from the period of invasions. The Crusades to the Holy Land were beginning to turn the militancy of warriors away from their European neighbors. Travel within Europe became safer and easier. Pilgrims streamed across Europe from shrine to shrine, on foot, in search of salvation. In the eleventh century, a vast building program seems to have begun almost spontaneously, with monasteries erecting magnificent new churches to attract and accommodate pil-

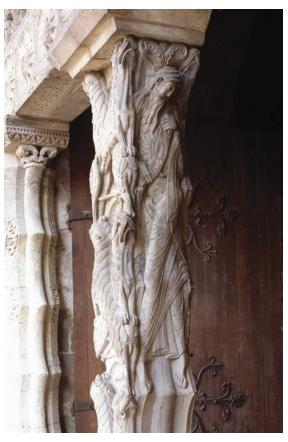


13-24 Adam and Eve Reproached by the Lord, from the bronze doors commissioned by Bishop Bernward for Saint Michael's at Hildesheim, Germany, 1015. Bronze, 23" × 43".

grims. One of the important stops on the pilgrimage route through southern France was the church of Saint Pierre at Moissac.

The most famous sculpture at Moissac is the figure of a prophet (13-25), done around 1115, or about one hundred years after the Hildesheim doors. Carved into the trumeau (the central pillar of the main doorway) of the church is the emaciated, elongated, and extremely expressive figure of an Old Testament prophet. The body of this holy man seems to have been stretched vertically and twisted horizontally to fit it into the space of the column. It is almost as if the prophet were eternally, awkwardly trapped in a prison of stone. He is not only a man of God, but the victim of a kind of divine energy. His gentle face and long, flowing beard, his bony feet and writhing body all give the impression of a person who has left physical concerns and material comforts far behind.

Around the year 1000, the theme of the end of the world, or the final day of judgment, became common in medieval art. Many believed this time was near. A vision of the Apocalypse, or end of time, from the New Testament Book of Revelations, was carved into the entrance of the Cathedral at Autun. Completed just a few years after the prophet from Moissac, we see the *Last Judgment* (13-26) described in grisly detail. The moment pictured is one where four angels blow their trumpets, and the dead are resurrected to



13-25 *The Prophet Jeremiah (Isaiah?)*, from the trumeau of the south portal of Saint Pierre, Moissac, France, c. 1115–1135. Stone, life-size.

be judged. The angels appear with long, curved horns in the corners of the work. The huge figure of Christ in the center dominates the composition, completely out of scale with the other figures. On the left side, the saved are allowed to enter heaven and worship God. On the right, horrible monsters join the Archangel Michael in the task of weighing souls (13-27). Under the semicircular tympanum, on the horizontal lintel of the doorway, we see the figures of the dead—on the left prepared for heaven, on the right pushed off toward hell. Beneath the earth the damned wait in terror for their punishment; one is in the process of being plucked up by a set of disembodied hands. As in the trumeau at Moissac, angular figures seem to be cramped into the space



13-26 Gislebertus, *Last Judgment*, from the west tympanum of Saint Lazare, Autun, France, c. 1130. 11' 4" high, 21' wide at base.

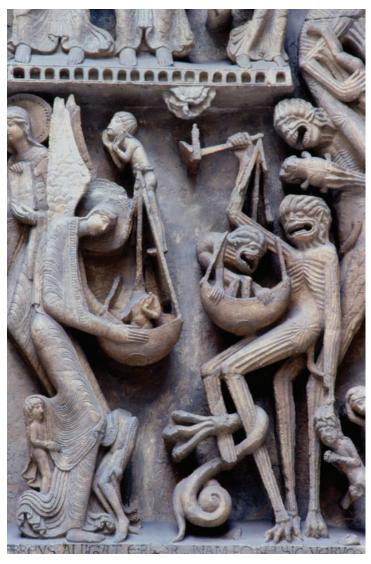


they inhabit. Classical balance and repose are totally lacking, replaced by energy and tension. As before, nude bodies are objects of shame. The overall message is truly horrifying.

Although fairly typical of the *Romanesque style*, Autun is unusual because most of the sculpture was done by a single artist and one who has left us his name, Gislebertus. The entire sculptural program of the church is the result of his very personal vision and imagination. This is not a case of the artist copying

from past models (as in the *Book of Lindisfarne*) but of an artist who is reinterpreting a story in a fresh and immediate way. The work at Autun is proof that by 1100, some medieval artists were allowed to express their individuality.

Individuality and self-expression were not, however, typical of most art done during the eleventh and early twelfth centuries. As befitted the warlike times, architecture tended to be massive, solid, and strong. This was true not only of castles and fortresses, but

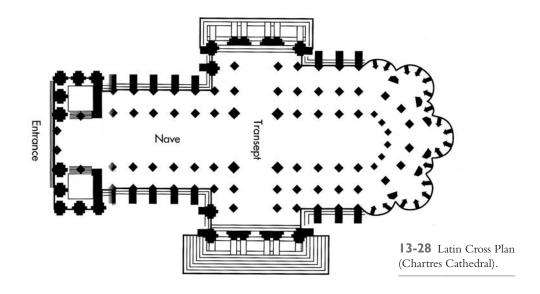


13-27 Detail of Last Judgement, Autun.

also of churches and monasteries. The style of these buildings is called Romanesque, because they were based on the Roman building principle of the round arch. Medieval building techniques and engineering, however, were not as sophisticated as those of the Romans. Whereas the Romans were able to create multistoried structures like the Colosseum and huge open spaces like the Pantheon, medieval builders were more limited in their abilities. Heavy stone buildings were supported by thick walls. Few windows pierced these massive walls and towers. The interiors of the churches were dark and mysterious, lit with candles. The European feudal economy could not support elaborate marble and mosaic decorations such as those typical of the Byzantine Empire or the richly decorated mosques that filled the Islamic world. Ornament was provided simply by the sculpting of the stone itself, as seen in the trumeau and tympanum above.

There are, however, important similarities to the Classical style. As in Greek and Roman architecture, decoration was confined to certain specific parts of the structure, and the overall structure is clear to the eye and easy to understand. Buildings were made of geometric shapes, combining the rectangle, square, and circle.

By the early Middle Ages, the basic shape of Christian churches had evolved into that of a so-called Latin cross, with a long, rectangular room, or **nave**, crossed by a shorter rectangular **transept** that ran perpendicular to the main space (**13-28**). The very shape was symbolic of Christianity, Christ's death, and resurrection. In large churches, the central nave was flanked by two narrower *aisles*, running beside the more open space of the nave. Heavy Roman-style



rounded arches with columns on either side of the nave supported the weight of the roof. The rhythmic repetition of columns and arches created a visual sense of order and stability—but not grace. There is something monumental, solid, and even rather squat and square about the design of most Romanesque churches. As with the Romanesque Sainte-Madeline in Vezelay (10-23), rows of columns seem to march with heavy tread, like armies, toward the altar. The whole shape of the church is like a rounded tunnel, a round arch extended through space to form a barrel vault (see Chapter 10). There is a feeling of utter solidity. Within fifty years, this powerful style would be replaced by something completely different. Born in the region of Paris, the Gothic style would express a new, northern European aesthetic.

The Gothic Style

The period of the twelfth and thirteenth centuries, when hundreds of Gothic cathedrals were erected, was one of prosperity and growth in western Europe. The Western world was becoming more cultured because of the sophistication of returning Crusad-

ers, growing trade with Islamic Spain, and increasing wealth. Thriving towns vied with each other to build ever-larger and more beautiful cathedrals—symbols of civic pride as well as religious devotion. Cathedrals like the one at Chartres cost many fortunes to build. Chartres Cathedral (13-29), in a small town outside Paris, was not the first Gothic cathedral in France but has been considered the most perfect representative of the Gothic style. This style developed as Chartres was being built, and the building exhibits the changing taste of several centuries. It is fitting that we view Chartres within the medieval town from which it grew. Gothic churches were most often cathedrals built in towns, rather than monasteries out in the countryside. Their worshippers were not primarily monks, nuns, and pilgrims but ordinary working people and noble patrons. The building of a Gothic church was a great undertaking accomplished not by the church alone, or by any single class of society, but by all of the townspeople, who took great pride in their accomplishment. At Chartres, noble patrons paid for the elaborate sculptural decoration over the doorways and competed with each other to erect ever-more beautiful statues and stained-glass



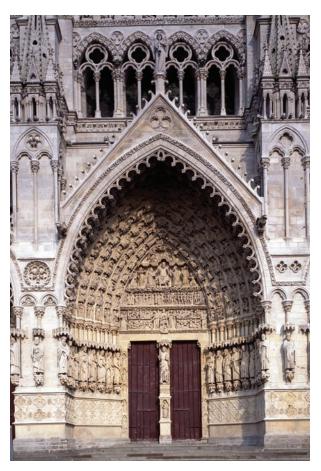
13-29 Chartres Cathedral, France, c. 1194-1260.



13-30 Amiens Cathedral, France, c. 1220–1236 (area above the rose window, early sixteenth century).

windows. Other windows were the gifts of the town guilds (see Art News box).

The unique features of Gothic architecture were the pointed arch, the ribbed vault, exterior buttresses, and stained-glass windows. The pointed arch (see Chapter 10) made it possible for churches to become much taller than had previously been possible. The weight of these dramatically soaring arches was carried not by the walls but by reinforced ribs that created a stone skeleton for the structure. To stabilize this skeleton and keep the building from collapsing outward, supports called buttresses were constructed outside of the cathedrals—a decorative exterior scaffolding. This elaborate support system made it possible to replace large expanses of stone walls with brilliant stained-glass windows. In contrast to Greek temples, which are usually horizontal, or Romanesque churches, which often appear to be based on a square, the lines of Gothic arches and spires seem to soar toward the heavens. This is true of both the exteriors, as in Chartres and Amiens (13-30, 13-31),

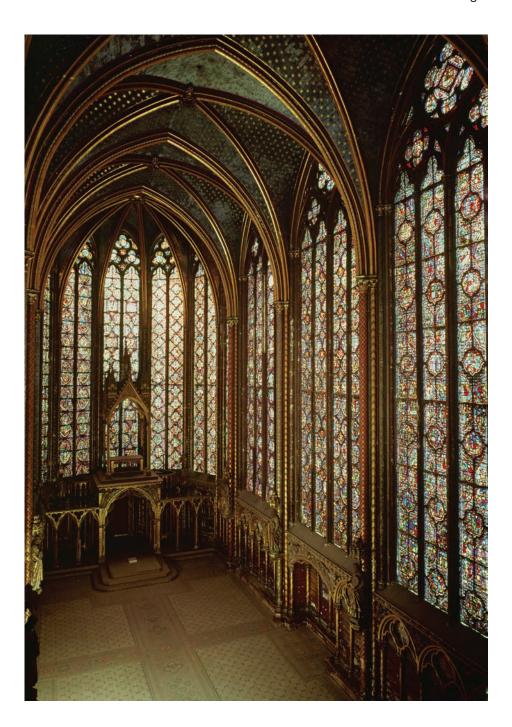


13-31 Central portal, west façade, Amiens Cathedral.

and interiors, as in *Notre Dame* (1-16), *Amiens* (10-24), and *Sainte Chapelle* (13-32).

In contrast to Classical and Romanesque, Gothic decoration was organic—that is, it seemed to be alive. Gothic cathedrals were often covered with intertwined, vinelike curlicues that seemed to sprout from every surface. In cathedrals such as *Amiens* (13–31), the mass of the walls is penetrated by intricate voids and lacy projections that almost dissolve the basic shape of the building. If Classical art is geometric, logical, controlled, balanced, and harmonious, Gothic art can be seen as organic, intuitive, teeming with life, free—almost the polar opposite.

The Gothic style was not simply the expression of an anti-Classical taste, however, nor the result of certain technical innovations in architecture. The outer form of a Gothic church was an expression of its spiritual function. We know something about this because one of the initiators of the Gothic style, Abbot Suger, left extensive records from the con-



13-32 Interior of Sainte Chapelle, Paris, 1243–1248.

struction of the first Gothic church, Saint Denis. In these records, Suger explains exactly what he wanted from the new style of architecture. His idea was that "the wonderful and uninterrupted light of the most luminous windows" would assist the soul in reaching a state of transcendence, that the material beauty of the architecture would provide a bridge to a completely spiritual experience.

The idea of transcendence of the earthly realm was expressed in all the visual elements of Gothic

architecture: the soaring, graceful lines of the pointed arches; the breathtaking open space above the heads of the worshippers; the replacement of heavy stone walls by panels of brilliantly colored glass. Here the spirit could fly upward, toward heaven. One of the most glittering examples of the Gothic desire for color, space, and light is the royal chapel of *Sainte Chapelle* (13–32) in Paris. Here the walls are gone; the stained-glass windows are interspersed with slim, golden ribs that are more like stems than columns.

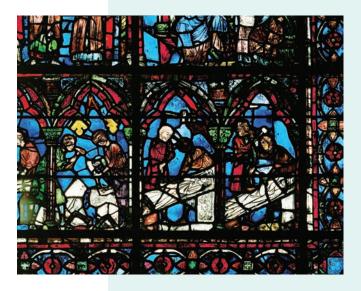
RT NEWS

The Dimming of National Treasures

he fifty thousand square meters of medieval stained glass in France is more than that in the rest of the world combined. The Gothic cathedrals are one of the nation's most precious treasures but, unfortunately, they are also in danger. Centuries of rain and wind have stained them, and now air pollution is having its effect, too. Controversy has surrounded a recent attempt to clean some of the windows of the cathedral at Chartres (13-33), described by the American writer Henry Adams in 1904 as "the most extraordinary creation of all the Middle Ages—a materialization of the most exalted dreams of humanity." An association of artists complained that after the famous blue glass (detail, 13-34) was cleaned, it had become paler and grayer and lost its ability to reflect light. It was later revealed that one of the cleaning chemicals was a kind used by industry for bleaching. A synthetic resin applied to the exterior was impossible to remove. The government halted the restoration out of fear that more harm than good was being done. No one doubted the pressing need for restoration, but no one had a sure answer to how it could be done safely.

While restoration resumed in 1986, it has been time consuming and expensive. Restoring the 170 windows will cost more than \$75,000 each, and because many of the most important windows are at a great height, the expense of scaffolding may double the cost. A fundraising campaign is underway, but time is running out for Chartres. Ninety years earlier, Henry Adams had already realized that there was too little research on stained glass and said, "The French have been shockingly negligent of their greatest artistic glory."

13-33 *Legend of Saint Cherón,* first north radiating chapel of the ambulatory, Chartres Cathedral, France, 1194–1220. Stained-glass window.





13-34 Saint Eustace Hunting from the Life of Saint Eustace, north aisle of the nave, Chartres Cathedral, France, 1194–1220. Stained-glass window (detail).

At Sainte Chapelle we see the ultimate in jewel-box-like aristocratic elegance.

Medieval Art in Italy

The art of Italy during the Middle Ages was not like the art of northern Europe. The Italians never really developed a taste for the more elaborate embellishments of Gothic decoration. In fact, Italy never completely turned its back on the influence of Classical art and architecture. Italian churches tended to be more geometric and solid. The walls did not dissolve into panels of stained glass. This was partly for practical reasons; in the bright light and hot climate of Italy, churches were designed as a refuge of shade and coolness. They were decorated with the Classical media of fresco and mosaic.

The design of San Miniato in Florence (13-35), built between 1060 and 1150, demonstrates the continuity between Italian and classical architecture as compared to the Gothic cathedrals. Sitting on a hill with a magnificent view of the city, the church is geometric and symmetric, its exterior is covered with sheets of green and white marble arranged in a harmonious pattern of rectangles, circles, and semicircles. The only other decoration is a single, central mosaic and a series of abstract symbols traced in the same green-and-white marble. The columns are Corinthian, with none of the carved decorative figures typical of northern European architecture in this period. Compare this simple decorative scheme with the multicolored painted sculptures that crowded onto the façade of Amiens Cathedral (see Box in Chapter 2). Still, one could not mistake this building for a Classical temple, despite its glowing marble façade; we have seen nothing quite like this before. Some architectural historians believe that this style not only influenced, but actually foreshadowed, the work of Italian Renaissance architects like Brunelleschi (see Chapter 14).

During the Middle Ages, Italian sculpture also continued to be influenced by Classical models. A vivid example is the work of the sculptor Nicola Pisano, done in the mid-thirteenth century. For the baptistery in Pisa, Pisano carved an elaborate marble pulpit that included nude figures. One of the panels illustrates three events from the story of Christ's birth. On the left is a scene of the Annunciation, with the Archangel Gabriel informing the Virgin Mary that she is to have a child. In the center of the relief (13-36), Mary reclines after giving birth in



13-35 San Miniato al Monte, Florence, 1060–1150.

the manger, with the baby Jesus wrapped in swaddling clothes behind her. The upper-right corner shows angels announcing the birth of the Messiah to shepherds in the fields. Finally, along the bottom, Mary and Joseph watch as the child is bathed. The use of many stories within the same frame is typical of Medieval art, but the style of Pisano's carving is clearly influenced by Greek and Roman sculpture. One obvious similarity is the use of Classical costumes and ancient models for the faces and hair-styles, as well as nude figures. Another is the rounded carving of the figures; there is no doubt that Pisano was inspired by Roman relief sculpture, which could still be seen throughout Italy.

But while Italian architecture and sculpture showed the influence of ancient art, Italian Medieval painting



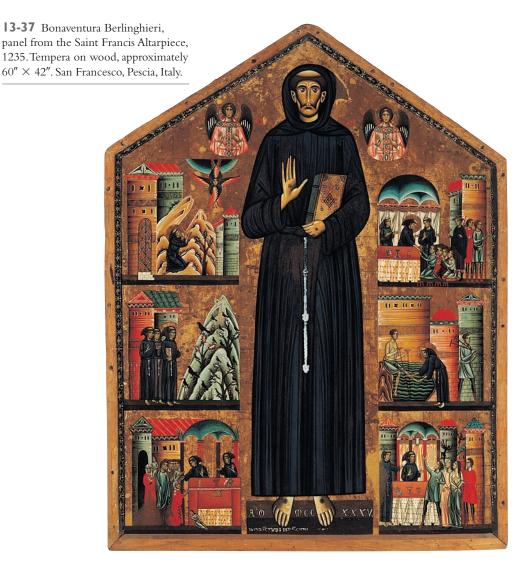
13-36 Nicola Pisano, *The Annunciation and the Nativity*, 1259–1260. Marble relief, approximately $34'' \times 45''$.

was closer to the art of the Byzantine Empire. Many of the characteristics we observed in the mosaics of Justinian and Theodora in the Church of San Vitale at Ravenna in the sixth century continued to dominate the art of the Byzantine Empire—the stylization and elongation of figures, the flatness and love of color and pattern.

In the eleventh and twelfth centuries, Italian painters began to use a new art form to decorate their churches: painted wooden panels were made to hang behind the altar. Such pictures featured the Christian subject matter of crucifixions, madonnas, and the lives of saints. The *Saint Francis Altarpiece* of 1235 (13-37) by Bonaventura Berlinghieri is typical of this kind of Italian-Byzantine painting. The center of the composition is dominated by an oversized figure of Saint Francis, the Italian saint noted for his gentleness and renunciation of all worldly goods and powers. The compassionate and human Saint Fran-

cis, however, is shown in a stiff pose, looking more like a flat pattern than a real person. This solemn figure is surrounded by smaller scenes that tell stories from the saint's life. The background of the panel is gold, and although the saint is shown in a drab costume, bright shades of blue and red enliven the little scenes. Most of these scenes show Saint Francis's miracles and stress his supernatural powers.

Close examination of one such scene, Saint Francis Preaching to the Birds (13-38), reveals the characteristics of the late Medieval style. Because painters in Berlinghieri's time copied the elements of their pictures from pattern books rather than basing them on studies from life, the figures are generic, with no individual qualities. Francis is nearly identical to the other monks; he can be identified only because of his attributes—his halo, signifying his sainthood, and the stigmata (wounds of Christ) on his hands and feet. The birds are also one basic form repeated with



13-38 Bonaventura Berlinghieri, *Saint Francis Preaching to the Birds*, detail of figure 13-37.

little variation. Natural scale and proportion were not considered. The three monks could never fit into the tiny, flat monastery behind them. The space between the figures is inadequate; they seem to be attached to one another like glued paper dolls. The mountain in front of them is hardly a hill, its trees little more than decoration.

Yet it is a mistake to judge the scene by whether it is realistic or not. Berlinghieri's altarpiece is one more example of an art of faith and devotion. Correct proportions or solidity are not his concerns. The art of the altarpiece, as in art across much of the globe in the Age of Faith, is in the arrangement of the sacred stories into an imaginative and satisfying design.



The Renaissance

n the Italian town of Padua around the year 1300, a simple chapel was built alongside a palace. Because an ancient Roman amphitheater had once occupied that site, the chapel became known as the Arena Chapel. Its plain, unassuming exterior seems to make it an unlikely site for one of the most important achievements of Western civilization. But an extraordinary experience awaits those who enter the chapel because the flat, unadorned walls were transformed between the years 1305 and 1310 by one of the pivotal figures in the history of art, an artist named Giotto.

	PERIOD	HISTORICAL EVENTS	
1300-1400	First signs of the Renaissance in Italy Gothic Period in Northern Europe Moorish rule in Spanish Granada Yuan Dynasty of the Mongols overthrown by Ming in China Aztec empire established in Mexico	Dante's Divine Comedy c. 1310 Papal court moves to Avignon 1309 The Black Death in Europe 1348	
1400-1492	Early Renaissance in Europe Inca civilization in Peru Golden Age of Venetian Empire Print revolution in Europe	Joan of Arc burned at the stake 1431 The Medici rule of Florence begins 1434 Ottoman Empire conquers Constantinople renamed as Istanbul 1453 The Gutenberg Bible 1455	Portuguese mariners round tip of Africa 1487 Columbus sails to the Americas 1492
1492-1560	High Renaissance in Italy The Renaissance continues in the rest of Europe European Age of Exploration and Discovery African slaves transported to Americas Mughal dynasty in India Height of Ottoman Empire	The Protestant Reformation begins 1517 Machiavelli's <i>The Prince</i> 1517 Cortez conquers the Aztecs 1519–1521 Magellan's voyage circumnavigates the globe 1519–1522 Henry VIII becomes Head of the Church of England 1531	Copernicus declares the planets revolve around the sun 1543

Initiating a return to visual realism, Giotto almost singlehandedly created the Renaissance style of painting. In *Lamentation* (14-1), one of the frescos in the Arena Chapel, we can see a sculptural solidity that had not been seen for more than one thousand years. There is weight to the figures, bulk, and flesh; they are rooted to the ground by gravity. They are solid people on a solid earth. If we compare this fresco to Berlinghieri's *Saint Francis Altarpiece* (13-37) done eighty years earlier, the change becomes very apparent. No longer are sacred stories being arranged to make a design. Giotto has a new way of telling stories; rather than multiple scenes in one panel, he chooses one significant moment. He tries to imagine how the holy scene might have really looked. The spaces between the figures seem natural. Figures are in true proportion to each other. They are placed in a natural setting.

More importantly, Giotto tries to imagine how his characters felt. Real human emotion is being displayed as the Virgin Mary and Christ's followers mourn over the dead body of Jesus. The viewer can empathize with each person and understand what he or she is feeling because Giotto has created a unique pose and facial expression for each one of them. Even the ethereal angels experience human emotions of grief and anguish, each in their own way. Giotto's characters are not generic people copied from a pattern book or people pictured by symbols of their roles in society. Now each is an individual first, a unique person. Giotto literally brought religious art down to earth.

Giotto was revolutionary in another way—he was a *famous* artist. For the past fifteen hundred years, since the Greeks, an artist was thought of as just another craftsperson, like a carpenter or a barrel-maker (Gislebertus being a rare exception). But Giotto's genius was recognized almost immediately; his services were in great demand by the most powerful leaders of fourteenth-century Italy. Dante Alighieri, his contemporary and friend, mentions Giotto's dominance of the art world in the *Divine Comedy*, writing "now the hue and cry is for Giotto." Beginning with Giotto and the Renaissance, the history of art is the history of great and famous artists.

ART

Giotto, Lamentation





Wu Chen, Bamboo in the Wind early fourteenth century

Schwedagon Pagoda fourteenth century



Court of the Lions, the Alhambra 1354–1391



Sluter, The Well of Moses 1395–1406



Brunelleschi, Dome of Florence Cathedral 1420–1436





Donatello, David c. 1428–1432





Aztec calendar 1479



Botticelli, The Birth of Venus c. 1482



Michelangelo, David 1501–1504



da Vinci, The Last Supper 1495–1498



Raphael, Madonna della Sedia 1510–1512



Ryoanji Zen Temple c. 1525





14-1 Giotto, Lamentation, c. 1305. Fresco. Arena Chapel, Padua, Italy.

THE IDEA OF THE RENAISSANCE

The historical period known as the **Renaissance** is generally considered to mark the beginning of the modern world. During this period, Europe underwent significant economic, political, social, and cultural changes, changes which led to the development of world civilization today. Capitalism, the rise of the nation-state, scientific investigation, individualism, the idea of progress—all have their roots in the Renaissance. The term, which means "rebirth," was coined by the people of fifteenth-century Italy. They saw their own age as an exciting flowering of art and culture after what they called the Middle or "Dark" Ages. For the leading thinkers of the fifteenth and sixteenth centuries, the medieval period was a barrier, a gloomy, uncultured period between themselves and the grandeur of ancient Rome. The poet Petrarch wrote, "After the darkness has been

dispelled, our grandsons will be able to walk in the pure radiance of the past."The Renaissance view of the medieval period has colored general opinion to this day.

The possibilities of life in medieval Europe *had* been limited. People were controlled by their place within the political system of feudalism, by the rigid rules of the Christian Church, and by a rural, agricultural economy that limited mobility and tied most people to the land for their whole lives. The world of an average person—a peasant—was restricted to the distance that could be walked in a few days.

Then, beginning as early as the twelfth century, but flowering dramatically in the fourteenth century in Italy and reaching the north in the fifteenth century, western Europe experienced an economic revival. This rebirth fostered trade and the growth of cities; it also resulted in an increase in wealth, learning, and sophistication that had not been seen since the greatest days of the Roman Empire, a thousand

years earlier. This explosion of energy sparked the Age of Exploration and took Western peoples all over the world. A direct result is today's global culture (see Global View box on "Gold of the New World").

But above all, the Renaissance is famous for advances in art and architecture. In fact, it is the only historical period known primarily for its artists and only secondarily for its political and religious leaders. Leonardo da Vinci, Michelangelo, Raphael—these names are familiar to everyone. The greatest of their works, such as the portrait of *Mona Lisa* and the ceiling of the Sistine Chapel in the Vatican, have never been matched and may never be surpassed in fame. The art of the Renaissance is the starting point of all later art in the West.

EARLY RENAISSANCE SCULPTURE AND ARCHITECTURE

During the Renaissance, Italy was divided into many city-states, each ruled by a powerful and wealthy family. By the beginning of the fifteenth century, Florence was in the midst of an economic boom and had become one of the most prosperous cities in

14-2 Filippo Brunelleschi, *The Sacrifice of Isaac*, competition panel for the east doors of the baptistery of Florence, 1401-1402. Gilt bronze relief, $21'' \times 17''$. Museo Nazionale del Bargello, Florence.

Europe. A wealthy, cultured society revolved around the ruling family, the Medici—international leaders in banking, as well as great patrons of the arts. There was a great deal of building—schools, hospitals, and especially churches. Artists from all over Italy were coming to Florence, attracted by the many commissions.

One famous competition was held to design the bronze doors of the city's baptistery. The finalists, both in their twenties, were Filippo Brunelleschi and Lorenzo Ghiberti. Each was required to execute a specific tale from the Old Testament, Abraham's Sacrifice of Isaac (14-2, 14-3), where the old patriarch was asked by God to prove his faith by killing his only son. The theme was chosen for the challenge of representing a variety of subjects—figures young and old, clothed and nude, as well as animals and landscape—and because it was thought to foreshadow the sacrifice of Christ by his own father. In both relief sculptures, Abraham is about to cut his son's throat when an angel of God rushes in and stops the sacrifice. Surrounding the main action are the donkey that carried Abraham and Isaac to the mountaintop, two servants, and a ram that appeared miraculously and was sacrificed as a replacement for the young man.

Ghiberti's design was selected for a number of reasons. Brunelleschi's seemed more cluttered, with



14-3 Lorenzo Ghilberti, *The Sacrifice of Isaac*, competition panel for the east doors of the baptistery of Florence, 1401–1402. Gilt bronze relief, 21" × 17". Museo Nazionale del Bargello, Florence.

too many distractions from the main action. The figures do not seem to be in true proportion; Isaac is small and his father seems to be almost twisting his head off. Ghiberti's, on the other hand, is a masterful composition. He has separated the main action from the rest of the scene with a diagonal cliff. He draws attention to the sacrifice by having Abraham's elbow stick out of the panel, so the viewer follows his arm down to the edge of the knife and then to Isaac's neck. Ghiberti's angel enters more dramatically than Brunelleschi's. Rather than coming from the left side in profile, the angel comes hurtling toward us from deep space. What may have clinched his victory, however, was the beautiful figure of Isaac. His nude form was reminiscent of the perfectly proportioned statues of the ancient Greeks and Romans, A fascination with the Classical Age was to be one of the strongest influences on Renaissance thought.

While Brunelleschi would lose again to Ghiberti when a second set of baptistery doors was offered to



14-4 Filippo Brunelleschi, Dome of the Florence Cathedral, 1420–1436.

competition, he would have a greater triumph—as an architect. The world-renowned *Dome of the Florence Cathedral* (14-4) is his creation. The cathedral, originally begun in 1296, with a tower designed by Giotto, was nearly complete when Brunelleschi began work in 1420. But it had a huge hole at its center. The space for the dome—nearly 140-feet wide—remained open to the elements, much too wide for any of the known building methods.

A dome presents a unique engineering challenge—how to support a great weight (the finished dome would weigh eighty million pounds) over a great distance with support only at a roof's edges. While the Pantheon's dome (12-27) covered approximately the same expanse as the cathedral in Florence, the methods of the ancient Roman engineers had been lost during the Middle Ages. Fortunately, after his two humiliating defeats to Ghiberti, Brunelleschi had gone to Rome to study the ruins of the ancient buildings. By using the results of his studies, combining them with medieval techniques, and by inventing many new ones over fourteen years of construction, Brunelleschi was able to solve the problem that baffled all his countrymen.

While his engineering achievement was marvelous, the *beauty* of the dome was even more aweinspiring. A herringbone pattern of red bricks was framed by eight white ribs that reached up to a lantern at the peak. The dome of the cathedral became the focal point of the city of Florence and remains so today. When Michelangelo, who was trained as a young man near the *Duomo*, designed his own dome for St. Peter's (see Chapter 10), he said, "I'll make its sister bigger, not more beautiful."

Once it was built, Brunelleschi became the most famous architect of his day. He continued to make many trips to Rome to study the classical architecture of the ruins and led the revival of interest in the culture of ancient Greece and Rome. These ruins would become an important source for Renaissance artists, and a pilgrimage to Rome would become a required part of an artist's education for centuries. Brunelleschi's use of the forms of classical architecture in an imaginative way, in order to achieve harmony and beauty, would be an example followed for the next five hundred years by almost every architect. Brunelleschi's study of the ancient monuments of the Greeks and Romans and Giotto's concern for the individual were the two main ingredients of humanism, the predominant philosophy of the Renaissance and catalyst for the period's great achievements.

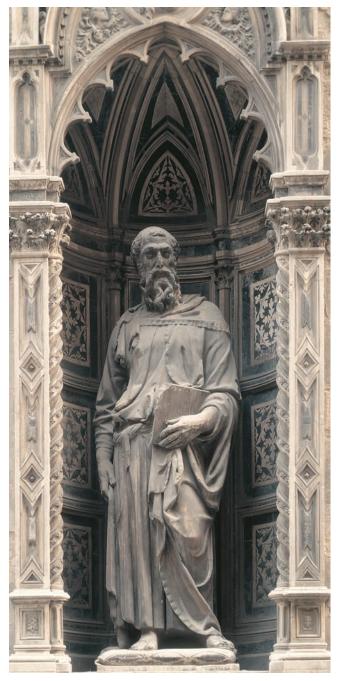
Donatello

When Brunelleschi went to study the ruins of Rome, he went with his friend, Donatello, a young man who would become the greatest sculptor of his time. Donatello had been a student of Ghiberti, but his achievements far surpassed his teacher, almost single-handedly creating the Renaissance style of sculpture. Saint Mark (14-5) was done when he was twenty-five years old. It shows he already had a great understanding of anatomy and form. We can see how the body shifts its weight at the hips, reminiscent of Greek statues like Doryphoros (12-17) nearly two thousand years earlier. Donatello's advance from the medieval style is very apparent when compared to what was naturalistic in its own time, Pisano's Annunciation (13-36). Rather than a crowded scene with many stories, we have a freely moving individual. We can see not only Donatello's mastery of the real features of a human body but also his ability to give a sculpture personality. Unlike Greek sculpture, Donatello's is not godlike but human. Saint Mark is dignified and thoughtful, his features strong but not perfect. He is a man who has lived on our earth and seen much; his hair is thinning and his brow is wrinkled.

The statue was commissioned by the Linen Drapers Guild of Florence, whose patron saint was Saint Mark. It is therefore not surprising that Donatello paid an extraordinary amount of attention to the drapery on his statue. The fabric seems to flow naturally with the body as in the ancient Venus de Milo (12-19) and is even inscribed with detailed embroidery. The Linen Drapers Guild was not one of the wealthier ones in Florence, so Saint Mark was made of marble rather than the more expensive cast bronze. A more affluent patron, probably a member of the ruling Medici family, commissioned David (14-6). It was the first freestanding life-size bronze figure since ancient times. Donatello was one of the first artists of the Renaissance to work from live models and to follow the Greek style by portraying David nude. For Donatello and other Renaissance artists, nudity was no longer shameful, as in the medieval period, but beautiful and capable of representing humanity's highest ideals.

Donatello's *David* is barely an adolescent, a boy who seems incapable of such a tremendous deed. He is almost effeminate; his muscles seem too weak to even lift Goliath's sword. Yet below him is Goliath's severed head, which the young boy is rolling around with his foot. How could this child defeat the giant

Goliath? Donatello's answer to this riddle is also the meaning of the Old Testament tale: Miracles can be accomplished only with the assistance of God. If Donatello had created a muscle-bound David, the miraculous nature of the story would be lost. Yet the boy seems unaware of divine intercession; instead, he is proud of his own accomplishment. Pride would remain David's flaw even as king of the Israelites.



14-5 Donatello, *Saint Mark*, 1411–1413. Marble, approximately 7′ 9″ high. Or San Michele, Florence.



14-6 Donatello, *David*, c. 1428–1432. Bronze, 62 1/4" high. Museo Nazionale del Bargello, Florence.

EARLY RENAISSANCE PAINTING: MASTERING PERSPECTIVE

Brunelleschi's discovery of the mathematical rules of perspective (see Chapter 3) transformed two-dimensional art. With perspective, drawing and painting were now raised to the level of science. In the ceiling of the *Room of the Newlyweds* (14-7), Andrea Mantegna, however, utilizes perspective in a playful way. He creates with paint a skylight with carved marble grillwork and fills the scene with people, cupids, a beautiful sky, and even a peacock (a symbol of fertility). It is believed that this was intended as a wedding-night surprise for the newlyweds. Happy family members peer down to encourage the young couple in a true tour de force of illusion.

In his grim *The Dead Christ* (14-8), Mantegna, following Giotto's lead in painting, tried to represent the events of the New Testament as realistically as possible. Unlike Giotto, however, he does not seem concerned with the inner emotion of his characters. He looks with a colder, less sympathetic eye. Mantegna's *Dead Christ* seems to be an eyewitness report. He depicts the wounds of Jesus with almost cruel accuracy. The mourners at the left are anything but idealized. Mary is not young and innocent as usually depicted but an old woman with leathery skin who cannot control her weeping. Still, the viewer is not allowed to be emotionally disengaged. Mantegna places us at Jesus's feet and forces us to examine what mankind has done.

A Love of Learning and Grazia

Mantegna, like the leading intellectuals of his time, considered the Middle Ages an era of superstitious thought. They felt it was time to see once again clearly and rationally as the Romans had. This desire to see clearly was the source of the cold, unemotional eye of Mantegna's *Dead Christ*, as well as the mathematical vision of Piero della Francesca's *View of an Ideal City* (3-25).

Toward the end of the fifteenth century, there was a reaction to this coldness: a call for pictures with a sense of grace—called **grazia** by the Renaissance Italians. Sandro Botticelli's greatness was his ability to bring beauty and harmony to pictures that also embrace scientific and classical ideals. While filled with scholarly allusions, they do not weight his pic-



14-7 Andrea Mantegna, ceiling of the *Room of the Newlyweds*, 1474. Fresco. Ducal palace.



14-8 Andrea Mantegna, *The Dead Christ*, c. 1501. Tempera on canvas, approximately 26" × 31". Pinacoteca di Brer, Milan.

tures down. In fact, his figures float—they hardly touch the ground. Learning from the ancients was mixed with a graceful line and rhythm.

Botticelli's The Birth of Venus (14-9) is popular today because of its sweetness and the innocent quality of Venus as she floats in a fantasy world. Yet it is also a work of serious study, demonstrating that the artist was a scholar of ancient myths. The tale of Venus's birth is found in Hesiod's Theogony. When Cronus (the god of time) castrated his father Uranus (the sky god), he tossed his father's genitals to earth, which fell into the sea. From the foam of the splash, Venus was born. Botticelli's painting shows Zephyr, the god of the wind, blowing her to shore. In his arms is his wife Chloris, the goddess of spring, who blows flowers toward the newborn goddess. The symbolic meaning of the picture is that love triumphs inevitably over brutality, because out of the most brutal of acts, the goddess of love was born.

In the centuries since the fifteenth century, Botticelli's Venus has continued to symbolize ideal beauty. Yet if we look closely at her, we will see that she is not in perfect proportion. Her neck is quite long with a steep incline along the shoulder. Her left arm is also exceedingly long. But these distortions are intentional; they do not make for a deformed goddess of love. In fact, they help create a more graceful image than any realistic picture could. Distortion can sometimes create greater beauty.

Leonardo da Vinci

During the Renaissance, artists joined scholars in a search for the fundamental cosmic truths of proportion, order, and harmony. At the beginning of the era, the medieval tradition of looking to the authors of the past for these truths remained (see Arts News box on "Modern Anatomy"). Ancient masters like Aristotle were considered to have almost sacred authority, second only to the Old and New Testaments. Leonardo da Vinci was familiar with the old texts but questioned them, too. Unlike most of his



14-9 Sandro Botticelli, *The Birth of Venus*, c. 1482. Tempera on canvas, approximately 5' 8" × 9' 1". Galleria degli Uffizi, Florence.

contemporaries, he wanted to find out things for himself. If he came across a problem, he would not look solely for the answer in books, he would devise experiments to solve it. Leonardo was a leader on a new path—to nature and imagination, and a scientific approach to knowledge. He believed in observation and analysis. For example, to learn about flying, he would watch birds, not just read books. His famous drawing of *Vitruvian Man* (3–13) is a good example

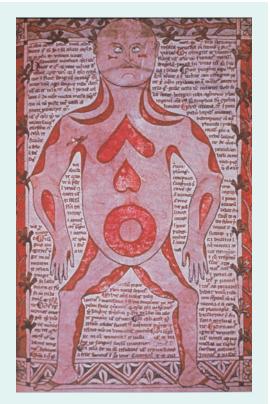
of his approach. He corrects the ancient architect's theory of ideal proportions to fit the actual ones of human beings. The method Leonardo used is called **inductive reasoning**, where one observes phenomena directly and then uses information gathered to develop general rules. The medieval method is known as **deductive reasoning**, where already accepted general rules determine how you explain natural phenomena.

RT NEWS

The Birth of Modern Anatomy

he medieval schematic of the muscle system (14-10) dates from the same period in which Giotto was painting. It is one of the earliest attempts to show the inner structure of the human body. Surprisingly, it is based solely on the work of Greek physicians. The art of Greece had beautiful representations of the human form, but it was truly a superficial understanding, because they did not know what lay beneath the skin. Dissections were forbidden in ancient and medieval times, so there were not many opportunities to learn the details of the human inner structure. Inner organs were revealed only after terrible accidents or wounds, which were probably not the best moments to make detailed studies.

However, in the early Renaissance, lawyers had an important role in increasing the knowledge of the human body, because they began requesting autopsies for their cases. By the end of the 1400s, dissections of cadavers were permitted and anatomy was an officially



14-10 Medieval schematic of the muscle system, *Ashmolean Codex 399*, *folio 22R*, early 1300s. Bodleian Library, Oxford.

recognized part of the university curriculum. Still, the study of anatomy made little progress because professors would never actually touch a cadaver. Their knowledge was not based on any actual study but rather on readings of ancient medical texts. In their anatomy classes, they would sit on a throne and lecture in Latin (the traditional language of the universities). Assistants (usually a local butcher) would do the carving. Another assistant would point with a stick to the area the professor was describing; however, he knew little about anatomy and usually did not understand Latin.

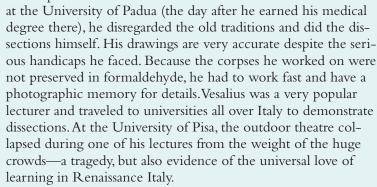
ART NEWS

It was an artist who made the first serious study of anatomy: Leonardo da Vinci (14-11) turned his incredible curiosity to the exploration of the unknown territory of the body. Obsessed by detail, he believed that detail revealed God's design. He did many anatomical studies, dissecting more than thirty cadavers before Pope Leo X barred him from sneaking into the mortuaries at night. By then, da Vinci had described the circulation of the blood (one hundred years before its official discovery). He was also the first person to study the reproductive system of women.

However, Leonardo's notebooks were the private records of an artist. Vesalius was the first scholar to publish detailed studies of the human body (14-12). Vesalius was a zealous scientist (obtaining cadavers from graveyards, mortuaries, and the gallows), and his illustrations are works of art. When he became a professor



14-11 Leonardo da Vinci, anatomical muscle studies, late fifteenth or early sixteenth century.



Vesalius's and Leonardo's research avoided a pitfall of the unconditional admiration in the Renaissance of the ancient Greeks and Romans. Modern anatomy could only be born when the old texts were abandoned and self-reliant scientists conducted truly scientific research on their own.



14-12 Vesalius, "The Muscle System," from *De Humani Corporis Fabrica Libri Septem*, 1543. Fratelli Fabbri, Milan, Italy.



DaVinci is the embodiment of the term "Renaissance man" because he worked in so many fields: anatomy, aeronautics, hydraulics, military engineering, and urban planning (see pages from his sketchbooks in figures 1-5, 14-11). During his long lifetime, he invented helicopters, armored vehicles, air conditioning, brakes, and transmissions. Among his many discoveries are how water flows, how birds fly, and that the heart pumps blood. Yet Leonardo never thought of himself as a scientist; he was first and foremost an artist. He believed that observation and investigation of the laws of nature were necessary for an artist to have a true understanding in order to produce works of art. But, of course, it was

more than that. As revealed in his notebooks full of detailed drawings, Leonardo, like many of his contemporaries, was in love with the act of seeing. He epitomized the Renaissance's enthusiastic rediscovery of the natural world.

THE HIGH RENAISSANCE

Leonardo's *The Virgin of the Rocks* (14-13) marks a new period in art—the *High Renaissance*. Compare it to a work of thirty years earlier, Mantegna's *The Dead Christ*. Mantegna's picture seems stiff. Its cold clarity seems impoverished when contrasted



14-13 Leonardo da Vinci, *The Virgin of the Rocks,* c. 1485. Oil on wood (transferred to canvas), approximately $6'\ 3'' \times 3'\ 7''$. Louvre, Paris.

with the liquid atmosphere and subtle muted light of Leonardo's picture. In this painting, hard edges are nonexistent. While it looks real, it is more like a dream, a vision. The figures of the Virgin Mary, the infant Jesus, his cousin John the Baptist, and the angel are not entirely of our world, nor should they be.

The Virgin of the Rocks shows the perfect ease and accomplishment, the effortlessness—the grazia—that Renaissance artists were looking for. But underlying the softness is a new structural innovation, a geometric underpinning, which will be used throughout the Renaissance—the figure triangle. Leonardo also used a new medium that had been developed in northern Europe—oil painting. The smooth and subtle transitions between light and dark are made possible by this revolutionary medium (see Chapter 5). As seen in Chapter 1, Leonardo also revolutionized portraiture. His Mona Lisa has movement and life beyond any seen before.

For the dining hall of a monastery in Milan, Leonardo painted The Last Supper (14-14). To make the event vivid to the Dominican brothers, he placed Christ's table in line with the tables of the monks. All of the figures are life-size. The moment he chose to portray is when Christ discloses to his followers: "One of you will betray me." The apostles react to the announcement in different ways, according to their character. Some recoil in horror. Others discuss who could have betrayed their master. One gentle soul asks Jesus if it could have been himself. Judas, the only figure whose face is in darkness, pulls back from Jesus and clutches his bag of silver. The Last Supper shows a masterful use of perspective and symmetry. Leonardo used Christ's head as the vanishing point, so all parallel lines on ceiling and walls lead directly to the center of attention. While no halo is actually painted above Christ's head, the pediment above creates one, and the light from the center window creates an aura around him.

Unfortunately, the masterpiece began to deteriorate almost immediately. Leonardo, incessant experimenter that he was, had altered the traditional chemistry of fresco (see Chapter 5) to allow more opportunities to make changes. The experiment was not a success. Even in Leonardo's own time, pieces of the paint began to fall off the wall. Today, after a time-consuming restoration to preserve what remains, some art historians estimate that the restored picture is no more than 20 percent of the original (see Issues in Art box).

Because of his genius, Leonardo, the child of a peasant, was given a high social position and became familiar with kings and queens. The king of France even threw his own mother out of her château so Leonardo could stay there. But toward the end of his life, Leonardo, acknowledged as the great artist of his time, felt the challenge of a younger man, one who would become the predominant artist of the High Renaissance.

Michelangelo

Giorgio Vasari, a painter, is best known for his *Lives of the Artists*, a contemporary biography of the important Renaissance artists (many of whom he knew). He introduced his chapter on Michelangelo Buonarroti with a description that seems more like the birth of a god than a man. After noting the achievements of Giotto and his followers, Vasari says:

the great Ruler of Heaven looked down and, seeing these vain and fruitless efforts and the presumptuous opinion of man more removed from truth than light from darkness resolved, in order to rid him of these errors, sent to earth



14-14 Leonardo da Vinci, *The Last Supper*, c. 1495–1498. Fresco (oil and tempera on plaster). Refectory, Santa Maria delle Grazie, Milan.

a genius universal in each art, to show single-handed the perfection of line and shadow, and who should give relief to his painting, show a sound judgment in sculpture, and in architecture. . . . He further endowed him with true moral philosophy and a sweet poetic spirit, so that the world should marvel at the singular eminence of his life and works and all his actions, seeming rather divine than earthly.

Michelangelo was a child prodigy. As a young man, it was said that no pose was too difficult for him to draw (see 4-1). Despite his great talent, his family (who believed they had noble roots) considered his vocation an embarrassment, and he was regularly beaten by his father and brothers. Apprenticed around the age of thirteen, he attracted the attention of the ruler of Florence, Lorenzo de' Medici, who arranged for Michelangelo to study sculpture in the private academy on the grounds of the Medici Palace. When he was only twenty-three years old, he was hired by a cardinal to sculpt the *Pietà* (14-15) for a church in Rome. The marvelous but melancholy Pietà shows the dead body of Christ after having been removed



14-15 Michelangelo Buonarroti, *Pietà*, 1499. Carrara Marble, 69" high. Saint Peter's, Rome.

from the cross, lying across his mother's lap. Mary is sad but dignified, the gesture of her left hand signifying acceptance. The unusual proportions (he is smaller than she) remind us that no matter what the age of Jesus at his death, we are looking at a mother whose child has died. As in Botticelli's *The Birth of Venus*, imaginative distortion increases his art's power.

After his success in Rome, Michelangelo returned home to Florence to work on an eighteen-foot block of marble that had been prepared for Donatello but left unused for decades. When Michelangelo trans-



14-16 Michelangelo Buonarroti, *David*, 1501–1504. Marble, approximately 13′ 5″ high. Galleria dell'Accademia, Florence.

formed the enormous stone into the finished statue of *David* (14-16), the city fathers decided to put it in the Piazza Vecchio, the main square, as the symbol of Florence. The statue shows David before he killed Goliath. David is tense but confident, sling across his shoulder, his right hand loosely fingering the stone. His eyes stare intensely as if he is choosing the right moment for his attack. Unlike Donatello's version (14-6), this David is not a child but a powerful young man, a worthy symbol of the youthful vitality of Florence.

When Michelangelo was thirty years old, Pope Julius II summoned him to Rome for his first papal commission: sculpting the pope's tomb. With youthful enthusiasm, Michelangelo drew up a design for an enormous tomb with forty bigger-than-life statues. He left Florence for the marble quarries of Carrera. He spent several months picking out the marble because of his singular vision of the sculptural process. Michelangelo believed that if chosen properly, his sculpture was already alive in the block of stone. He needed only remove the excess to release the figure within.

Michelangelo returned from his months in the quarries and filled half of Saint Peter's square with his stones. However, the pope was no longer interested in the tomb. He did not tell Michelangelo, but he had decided to tear down the old Saint Peter's, the most venerated building in the Christian world, and replace it with a new one, a massive undertaking (see Chapter 10). Michelangelo was furious and told Julius II (known as "the terrible pope" for his temper) he was leaving Rome, and he would never have any dealings with him again. Rather than hunting down Michelangelo and executing him, as might have been expected, emissaries of the pope began negotiations through the leaders of Florence for Michelangelo to return to Rome. The pope had a new commission for Michelangelo—to cover the ceiling of a tremendous chapel adjoining Saint Peter's (the old ceiling had developed cracks). It was 5,800 square feet, blue covered with gold stars.

Michelangelo was not interested in this new commission. First, he wanted to complete the project for the tomb he had spent so much time planning, and second, he told the pope, he was a sculptor not a painter. This was not an overstatement. The artist had only completed one painting since his apprenticeship. He finally agreed to paint the ceiling after many heated discussions because the pope promised he could finish the tomb afterward. What this "sculptor" created was the world-famous masterpiece, the ceiling of the *Sistine Chapel* (14-17).

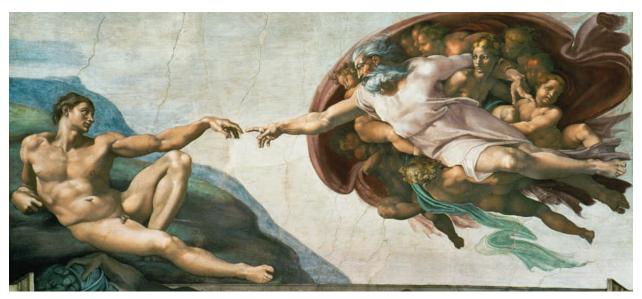
Working on scaffolding seventy feet from the floor, it took Michelangelo about four years to complete this project. At first, eager to finish quickly and begin again on the tomb, he planned to paint only the corner spaces, making portraits of the twelve apostles in each of them. However, the word "ambitious" is hardly sufficient to describe what became his ultimate plan. Michelangelo decided to represent the history of the world before Moses, from the first event in Genesis—the separation of light from darkness—to the story of Noah. Surrounding the main scenes are prophets who predicted the coming of Christ. Supporting every subject and scene are realistically painted architectural elements and nude figures who react to the scenes they frame. The Sistine ceiling contains more than three hundred figures, all in an incredible variety of poses and actions and all depicted as fully rounded three-dimensional forms, as one would expect from the hand of a sculptor. Pope Julius II, while reputed to be impatient, cooperated with just about all of Michelangelo's requests. Special scaffolding was built to his specifications, pigments he required were imported from Turkey, and it is believed that he hired thirteen assistants. No one else was permitted in the chapel while Michelangelo was at work (see Art Issues box on "The Cost of Restoration").

While it is filled with philosophical and religious references, generally, the story Michelangelo tells over the length of the ceiling is the movement to pure spirit from the physical. He began painting in reverse chronological order. The first important scene shows Noah, his spirit numbed by alcohol, naked before his children and ridiculed by them. The next scene is The Flood, the torrents of rain and water sweeping the earth. Michelangelo realized after this scene that he had underestimated the effect of the height of the ceiling and began painting larger figures, starting with the Expulsion from Eden. After that comes The Creation of Adam (14-18), the most famous of the scenes, where a powerful and compassionate God (who resembles the ancient god Zeus) brings a still-weak Adam the spark of life. The Creation of Eve shows her pulled from the side of a sleeping Adam by a simple gesture of God.

Moving back farther in time, we are shown God racing back and forth across the heavens in *Creating the Sun, Moon, and Planets* and *Congregating the Waters*. The climax of the ceiling is the first moment of creation—the *Separation of Light and Darkness*. With *Jonah and the Whale* (symbolizing Christ's resurrection) just over the altar, they announce the inevitable triumph of the spirit over the physical world.



14-17 Michelangelo Buonarroti, the ceiling of the Sistine Chapel, Rome, 1508–1512. Fresco.



14-18 Michelangelo Buonarroti, The Creation of Adam (detail of figure 14-17).

RT ISSUES

The Cost of Restoration: The Sistine Chapel and the Last Supper

hen it is announced that beloved masterpieces are about to be restored, art lovers around the world hold their breath and hope that nothing goes wrong. History is filled with the destructive mistakes of well-meaning experts. In 1980, the Vatican announced that it had authorized four men to lead a team of restoration experts on an extraordinary mission—the cleaning of Michelangelo's Sistine ceiling frescos. By the time the team had finished nearly ten years later, they had not only removed centuries of grime but also had attracted the ire of many art experts around the world. More importantly, they forever changed the way the ceiling and its artist will be seen. In 1999, restoration was finished on another world-famous masterpiece, Leonardo's *The Last Supper*. A tedious process of twenty years, the approach taken by restorers and the ultimate result were also sources of controversy.

Before beginning the Sistine Chapel restoration, computers were used to map every single inch of the 2,732-square-foot ceiling—cracks, dirt, and all. Gammaray, infrared, and thermal photographs were entered into the computer to reveal the many layers of the fresco. A huge movable scaffold was built (with an elevator) and was attached to the same spots that Michelangelo used for his scaffold in the early years of the sixteenth century. Many tests would be made before an area was cleaned—one square foot at a time. First, the dust would be wiped off the area. Then a sponge with pure, distilled water was used. After that a gooey chemical solvent was applied with a brush, and then the miracle began. In three minutes, it loosened and mixed with four centuries of soot, varnish, and grease from candles, glues, and old restorations, leaving a soft mixture to be wiped away with a sponge and water.

Figure 14-19 illustrates the unique partnership between craftspeople and computer technicians that transformed not only the appearance of Michelangelo's

ART ISSUES

masterpiece but also our understanding of it. The restorers gained an intimate knowledge of Michelangelo's working procedures and built a valuable data bank in the computers that shows his progress day by day. Except for the paintings on the sides, most of which were painted from his imagination without drawings, Michelangelo would scratch a fairly detailed sketch into the wet plaster before painting. Close up, one can almost see Michelangelo at work. One sees parts of the ceiling where the artist ignored original plans as a new idea occurred to him. Restorers even discovered hairs from Michelangelo's brushes still imbedded in the original painting.

The familiar dark and dignified Sistine ceiling studied by art historians for centu-



14-19 Frescoes being restored, Sistine Chapel ceiling.

ries no longer exists; it has been replaced by a brightly colored, lively display. Before the cleaning, Michelangelo was known as a master draftsman, capable of foreshortening figures in a marvelous variety of poses, but he was also considered an indifferent colorist, more concerned with creating sculptural forms in paint than making strong color statements. No longer. The vivid colors discovered in the cleaning process provided a new picture of the genius of Michelangelo. The darkness of the painting was largely a result of animal glues used in varnishes by past restorers. The varnishes were used to brighten the painting but would inevitably deteriorate, making the painting even dimmer than before the varnish was applied. Over time, Michelangelo's fresco became darker and darker. Long before the twentieth century, the somber Sistine ceiling was the only one remembered. So it is not surprising that scholars around the world were shocked to see the new version. Many criticized the restorers, accusing them of removing not only dirt and old varnish but also a second coat of paint they believed Michelangelo had used to soften the colors. Some said the Sistine ceiling had been destroyed. Others say that the unhappy critics are having difficulty adjusting to Michelangelo's original, colorful pictures. The sooty ceiling was an aged and well-loved friend that they miss.

The process of restoring the equally beloved *Last Supper* of Leonardo da Vinci was perhaps even more challenging (14-20). It began in 1979 with the simple goal of reattaching paint that had flaked off, but soon expanded to a complete restoration. Unlike the relatively well-preserved Sistine ceiling, the *Last Supper* has had a long, unfortunate history. Its deterioration began almost as soon as Leonardo completed it in 1498, because the artist had experimented unsuccessfully with the fresco medium. In the 1600s, a door was cut at the painting's bottom, removing Christ's legs. When Napoleon invaded Italy, he used the refectory where the *Last Supper* is housed as a stable.

In the centuries since Leonardo finished the painting, many restorers tried to rehabilitate it, and some of their methods only increased the picture's problems. For example, restorers in the 1700s painted in oils directly onto the picture. When their

ART ISSUES



14-20 Restoration of Leonardo da Vinci's *The Last Supper*.

restorations flaked off, each flake took some of Leonardo's original paint with it. Subsequent restorers decided to repaint the picture rather than restore it, some changing the artist's original vision. Their overpainting also damaged the chemicals in Leonardo's paint. Twentiethcentury restorers did better work, but during World War II an Allied bombardment hit the refectory, shaking the painting and caving in the roof. The Last Supper was covered for years while the building awaited repairs. Mildew grew on its surface during that time.

The primary goals of the most recent restoration were to remove

all previous restorations and to reattach only the remaining original parts of the masterpiece. Pinin Brambilla Barcilon devoted two decades of tedious labor to the project. Now a woman in her seventies with weakened eyesight and chronic pain, she said, "Centimeter by centimeter I worked with a knife and microscope for 20 years to remove what five centuries of restoration and dirt had left behind." A day's work might only complete an area the size of a postage stamp. The most advanced technologies available were used. Infrared and chemical analyses were used to determine which paint was original. Small borings into its surface were made and miniature cameras inserted to examine the structural integrity of the wall. Today, the painting is protected by being exhibited only to small groups by appointment and in a completely climate-controlled environment.

Like the restoration of the Sistine Chapel, this restoration has been controversial in the art world. The decision to retain only Leonardo's original paint meant that Brambilla and her team removed much that had been familiar for centuries. For example, Christ's red beard was eliminated because it was determined to be a later addition. Many areas were left empty because they no longer had any of the original paint. While the colors in many parts are once again bright and luminous, the painting clearly reflects its substantial damage over the past five hundred years.

The restorations of the Sistine Chapel and *The Last Supper* cost many millions of dollars. Many millions of dollars will be needed to restore the Acropolis in Athens, and millions more on the damaged medieval stained glass in France (see the Art News box in Chapter 13). The costly and time-consuming restoration of paintings, sculptures, quilts, pottery, and buildings occupies tens of thousands of people around the world. How can such expenditures be justified in a world with so many problems, where children go to sleep hungry and families have no homes? It must be that people believe that, just as we have a responsibility to preserve our natural environment for the sake of future generations, we must preserve our cultural environment, the harvest of the best efforts of centuries of men and women.

Raphael

As you can imagine, this masterpiece had a profound effect on the artists of the Renaissance. Perhaps the biggest effect was on the younger Raffaello Santi, the artist we call Raphael. In 1508, the pope called on Raphael, then twenty-five years old, to decorate his private library in the Vatican, now known as the "Stanza della Segnatura." Because this was his first great commission, Raphael chose a great humanistic subject. Raphael decided to sum up all learning; each of the four walls would represent one discipline: theology, law, literature, and philosophy.

While decorating these walls, he managed to see Michelangelo's unfinished work on the Sistine ceiling. Legend tells us that he bribed the guards to let him see the ceiling while Michelangelo was away. He slipped into the chapel, climbed up the scaffolding, and was stunned by the masterpiece. Raphael immediately realized that his pictures in the library seemed backward compared to Michelangelo's and quickly redesigned and repainted all of his pictures.

The School of Athens (14-21) is the most famous wall of the Stanza. It is a picture of a heavenly world of knowledge, the Elysian (or "delightful") Fields spoken of by the Greek poets. We see the greatest philosophers of the classical period in discussion, thinking, teaching, and arguing. In the center is Plato, pointing upward to the ideal, and Aristotle, pointing downward to reality. On the lower left, Pythagorus, a Greek philosopher and mathematician, is writing; at right, Euclid, the Greek founder of geometry, is surrounded by many students.

The connection felt between those ancient times and the Renaissance of Raphael is given visual form by the artist's choice of models for the philosophers. Plato is also a portrait of Leonardo daVinci, for example. Euclid is the architect Bramante who designed the new Saint Peter's and whose ceilings and archways can be seen overhead. In the foreground, alone and moody, is Michelangelo as Heraclitus, known as the "weeping philosopher." At the farthest right, a sign of his modesty, is Raphael himself, posing as a student of Euclid.



14-21 Raphael, The School of Athens, 1509–1511. Fresco, Stanza della Segnatura, Vatican Palace, Rome.

Preparatory sketches were always important for Raphael, but he never made more than he did for this project. *The School of Athens* is known for its perfect composition and perspective. Unity is achieved by the repetition of arched (elliptical) shapes throughout. Even the figures form a large ellipse. As in Leonardo's *The Last Supper*, the vanishing point is placed at the center of attention—Plato and Aristotle. Notice how the seemingly casual form of the reclining Diogenes on the steps also points at the central figures. Even though it is more complicated than Leonardo's picture, *The School of Athens* remains a vision of order and dignity. Raphael achieves a harmonious composition of freely moving figures, something artists have admired in his work throughout the centuries.

The School of Athens shows Raphael's formal, mathematical side, but his Madonna della Sedia (14-22) shows his sweet and loving side. The sheer, ideal beauty of his pictures of the Madonna and Christ child made Raphael famous. Over the centuries, Raphael's Madonna della Sedia has been seen as artistic perfection. As a modern critic said, this picture would be recognized as a masterpiece even if it were found dusty and unlabeled in an attic. It is in a circular format called a tondo, which means in Italian "simple," yet it is probably the most difficult form for a painting compositionally because of a tendency to seem unbalanced and rolling. Raphael secured the scene by providing the strong vertical of the chair



14-22 Raphael, *Madonna della Sedia*, 1510–1512. Panel painting, tondo, 28" diameter. Pitti Gallery, Florence.

post. But that is merely a technical issue. The picture's lasting fame depends on the warmth, softness, and pride of Mary as she cuddles with the wriggling infant Jesus. One cannot imagine a sweeter expression of the love of a mother for her child.

Those who lived at the peak of the Renaissance believed the power of the mind made anything possible. The world seemed good and understandable. Raphael, one of the greatest masters of the Renaissance, managed to achieve its highest goals: *beauty, proportion, grace,* and a *sense of human virtue*.

THE RENAISSANCE IN VENICE

In the medieval period, bright colors were used for decorative and symbolic purposes; artists were not concerned with reproducing actual colors or even realistic forms. Partly in reaction to that art, the Florentines of the Renaissance were most interested in drawing issues, such as the realistic depiction of forms. Perspective and composition were the things that fascinated them: color was a secondary interest.

However, color was not a mere adornment for the artists of Venice but central to their work, giving energy and movement to their pictures. The greatest colorist and painter of the Venetian Renaissance was Tiziano Vecellio, or Titian. Unlike the geniuses of Florence and Rome, Titian's sole interest was painting; he was not an architect or a scientist. He mastered the medium with a single-mindedness that was unique for his time. He developed new techniques—for example, **impasto**, where thick layers of paint are built up for added richness (see Chapter 5). Titian would vary the texture of the paint itself, sometimes scratching into it with his fingers. His surfaces are full of energy.

Sensuality became a hallmark of Venetian painting, and the *Venus of Urbino* (14-23) probably epitomizes the Venetian love of sensual delight better than any other work. Here is Titian's ideal beauty, and she is very different from Raphael's or Leonardo's. She is an openly sexual woman, lying on cool sheets on a hot day. The purpose of this picture is not to give moral or religious instruction but to give pleasure. Notice how Titian uses color as a compositional element. The large red pillow (the hue is known as either Venetian or Titian red today) in the foreground is balanced by the red skirt in the background. The white shapes of the pillow and arm form triangles that lead back into the background. Titian had cre-

14-23 Titian, *Venus of Urbino*,1538. Oil on canvas, approximately $48'' \times 66''$. Galleria degli Uffizi, Florence.



ated a new type of image, one that would be borrowed by artists for centuries. Romantics, Classicists, Realists, and Impressionists would all choose to continue the *tradition of the reclining nude*.

Palladio and Architecture

While Leonardo, Michelangelo, and Raphael engaged in architectural projects, architecture never was a primary interest for them. The quintessential Renaissance architect was Andrea Palladio. His most influential building, the *Villa Rotonda* (14-24), has been a model for architects in every century since it

was built, in the mid-1500s. It is the essence of calm and harmony, a study of the purest geometric forms. The building is perfectly symmetrical, with four identical façades designed like a Roman temple on each side. A circular hall topped by a dome is the center of the building, making Palladio's design a circle within a square. This private retreat of a wealthy landowner rests on a hillside outside the city of Vicenza and provides four different views of the countryside from each of the entrances. Many classical-style statues on the pediments and stairways share the lovely views, which the occupants could choose from, depending on time of day, weather, or whim.



14-24 Andrea Palladio, *Villa Rotonda* (formerly Villa Capra), near Vicenza, Italy, c. 1566–1570.

Palladio was a scholar of ancient architecture and, like his predecessor, Brunelleschi, made many trips to Rome to study the ruins there. His influential treatise, The Four Books of Architecture, was written to encourage the construction of buildings that would bring the world into an ideal state. With floorplans and drawings, the book systematically explained classical architecture. Palladio also included the designs for his buildings, thereby putting his own work on the same level as the greatest architecture of the past. His treatise became the primary source of information on the buildings of the Greeks and Romans and was widely circulated. The familiarity of the Palladian style of architecture testifies to his treatise's acceptance as the authoritative guide to ideal architecture. Among many others, he would influence architects of the early American republic like Thomas Jefferson (see Chapter 10).

THE END OF THE HIGH RENAISSANCE IN ITALY

Unlike Raphael, who was only thirty-seven when he died, Michelangelo had a long, full life (living until the age of eighty-nine). Despite his immense talent, Michelangelo ended his life as a frustrated and angry old man. Many of the projects he began (like the tomb of Pope Julius II) were left unfinished. By the 1530s, he could see the age of the High Renaissance was ending, never to return.

In 1534, Michelangelo returned to the Sistine Chapel to paint an enormous fresco on the wall behind the altar. Thirty years had passed since he had completed the ceiling of the chapel. Since then, his beloved Italy had become a battleground, the victim of many invasions from the north. Even Rome had been sacked in 1527, leaving it in



14-25 Michelangelo Buonarroti, The Last Judgment, fresco on the altar wall of the Sistine Chapel, 1534-1541.



14-26 Detail of figure 14-25.

disarray. In Florence, the Medicis, once his patrons, had become tyrants who were propped up by the Spanish king. All across Europe, there was change. The Protestant Reformation (see following section) had split Christianity. Michelangelo became deeply concerned about the fate of humanity. He felt the world had gone mad, and he worried about the fate of his own soul.

Even though they share the same room and were done by the same artist, *The Last Judgment* (14-25) has a very different mood from that of the Sistine ceiling. On a dark and turbulent Judgment Day, Christ has come, but his arm is lifted in damnation as if he is destroying the world (14-26). Mary, his mother, turns her head away; she cannot bear to see his judgment. The heavens are in chaos. Ideal beauty and perfection no longer have a place in Michelangelo's painting. At the end of his life, using ugliness and terror for their expressive power, the greatest artist of the High Renaissance moved beyond its ideals.

THE BEGINNING OF THE NORTHERN RENAISSANCE

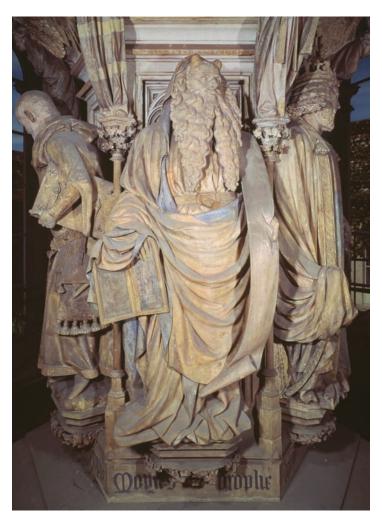
The Renaissance did not take place only in Italy. In the early 1400s, a century after Giotto but long before the birth of Michelangelo, it had also begun in northern Europe. As in the Italian Peninsula, growing cities made more powerful by trade altered the structure of society. The new wealthy courts in the Netherlands, Germany, France, and England became centers for art. Unlike Italy, however, the cultures of northern Europe had flowered during the Middle Ages. The Medieval Era, for example, was the era of the great Gothic churches and stained-glass windows in France. Therefore, the difference between medieval art and that of the Early Renaissance in the north is not as clear-cut as it was in Italy. However, during the fifteenth and sixteenth centuries, with commerce on the rise between Northern and Southern Europe, the ideas of the Italian Renaissance began to be gradually assimilated in the north.

Art in the Courts of the Duke of Burgundy

Based in both Dijon, France, and Flanders (now Belgium), the courts of the duke of Burgundy were two of the most significant artistic centers in the north by the end of the fourteenth century. This French

duke had inherited the Netherlands, one of the most prosperous lands in northern Europe, from his father, the king. By the end of the Renaissance, the Netherlands would replace Florence as the center of European finance.

The French felt that the artists of the Netherlands were the best in Europe. Therefore, it is not surprising that in 1395, Philip the Bold, the duke of Burgundy, sent for the Flemish artist Claus Sluter to design a huge crucifixion for a church in his capital of Dijon. Originally twenty-five feet tall, the statue's base is all that remains intact. Today it is called *The Well of Moses* (14-27), because it was originally placed over a fountain. It is an extraordinarily naturalistic sculpture, with life-size portraits of individuals who seem only to be leaning against the backgrounds temporarily. The Old Testament prophets Moses, David,



14-27 Claus Sluter, *The Well of Moses*, 1395–1406. Figures approximately 6' high. Chartreuse de Champmol, Dijon, France.



14-28 Jan van Eyck, *Giovanni Arnolfini and His Bride*, 1434. Tempera and oil on wood, approximately $32'' \times 23 \frac{1}{2}''$. National Gallery, London.

Jeremiah, Zechariah, Daniel, and Isaiah look as if they are about to leave the fountain, walk into the congregation, and begin to preach. Each is a unique character, and every part has been sculpted by Sluter with careful attention to realistic detail. Notice how the heavy cloth of Moses's robes is held to his waist by a precisely delineated belt. As realistic as the statues seem today, originally they were even more so, because they were not bare stone but painted. Moses wore a blue robe with golden lining. Jeremiah even had on a pair of metal spectacles.

Jan van Eyck

Another Flemish artist, Jan van Eyck, was the favorite artist of a later duke of Burgundy, Philip the Good. Although we do not know much about this artist's life, his sober, realistic style was most likely influenced by Sluter's. Like Sluter, he lived in Brussels but also traveled widely as a diplomat of the duke.



14-29 Detail of figure 14-28.

While the Italian Renaissance artists like Leonardo da Vinci were pursuing naturalism with the technique of *sfumato* light, van Eyck used a different approach to reach a similar goal. As seen in his *Virgin with the Canon van der Paele* (2–16), van Eyck used detail upon detail to carefully recreate nature. This obsession with detail is common in northern Renaissance painting and one of the clearest ways to differentiate it from the art of the south. If the painting is concerned with the beautiful surface of things, then it is most likely from the north.

Giovanni Arnolfini and His Bride (14-28, 5-5) is van Eyck's most famous work and is evidence of the growing trade between Northern and Southern Europe. It depicts the marriage ceremony between an extremely wealthy Florentine banker who lived in Flanders and the daughter of a rich Flemish family. At this time, civil marriages (versus church ceremonies) were permitted as long as they were witnessed by a government official. Since the painter was an appointed official of the duke, the painting served as both portrait and official document. On the back wall, between the bride and groom, is his elaborate signature—"Jan van Eyck was here 1434."

Van Eyck's painting is a good example of secondary symbolism. Medieval artists loved to make symbolic puzzles out of pictures, and van Eyck continues the practice. It was part of a desire to give realism even greater meaning by making each detail meaningful. The dog, for example, symbolizes Fidelity (Fido). Peaches ripening on the desk and windowsill suggest fertility. The chandelier has only one candle—the nuptial candle, carried during the ceremony and by tradition blown out right before going to bed on the wedding night. The ceremony is not totally secular. The main participants have removed their shoes because it is sacred ground. The mirror (with tiny scenes of the Stations of the Cross around its edge) probably represents the eye of God witnessing the ceremony (14-29). In it we can see the backs of the couple as well as van Eyck and his assistant. A rosary hangs to its side. The entire scene, while very naturalistic, symbolizes the holy sacrament of marriage.

Albrecht Dürer

Van Eyck mastered detail, color, texture, and realistic portraiture, but knowledge of mathematical perspective had not yet come from Italy. Like his fellow northern Renaissance artists, he accepted what he saw but did not search for underlying universal laws.

One man took it upon himself to bring the ideas of the High Renaissance to northern Europe—the German artist, Albrecht Dürer, who became known as the "Leonardo of the North" because of the variety of his interests: writing treatises on painting, perspective, human proportions, fortifications, and many other topics. Like Leonardo, he did many sketches from nature, studying its most delicate details.

Dürer is probably the first artist to paint pictures devoted solely to a self-portrait. His *Self-Portrait* (14-30) in 1500 shows him at the age of twenty-eight, after his return from Italy, where he studied the great works of the Italian Renaissance and became determined to bring this knowledge north. While the careful detailing of his fur collar is very typical of the northern style, his interest in High Renaissance composition is revealed by the pyramid construction of the picture. If you look closely, you will discover, in fact, that the composition contains several triangles. The portrait's striking resemblance to European images of Christ is conscious but not blasphemous; Dürer is saying he is a creator, too (note his hand's position).

Despite the exceptional skill demonstrated in his self-portrait, Dürer's greatest talent was not as a painter but as a printmaker. His graphic work, such as the *Four Horsemen* from his *Apocalypse* series (5-2),





14-30 Albrecht Dürer, *Self-Portrait*, 1500. Panel, $26\frac{1}{2}'' \times 19\frac{1}{4}''$. Alte Pinakothek, Munich.

made him rich and famous in his time and maintains his reputation even today. Dürer's technical skill and inventive mind are equally demonstrated in his metal engravings. He inherited his skill from his father, a goldsmith, who trained him (see Global View box on "Gold of the New World"). His technical mastery was combined with a marvelous eye for detail and the patience to render detail upon detail. The Knight, Death, and the Devil (14-31) contains an incredible variety of textures and shading. In it a Christian knight rides without fear through the Valley of Death with his faithful dog. Death, riding a horse, attempts to distract the hero with an hourglass, pointing out the shortness of life. He and the Devil-whose head is a grotesque collage of beasts—are ignored as the knight moves by on his way to glory and salvation.

14-31 Albrecht Dürer, *The Knight, Death, and the Devil,* 1513. Engraving on paper, $9\frac{3}{4}'' \times 7\frac{1}{2}''$. British Museum, London.

Dürer demonstrated that effects once thought possible only in paint could be accomplished by a master printmaker and helped make the print the equal of any other fine art form. He was recognized as being among the greatest masters even in his own time. In a discussion with the Holy Roman Emperor Charles V, Michelangelo said of Dürer: "I esteem him so much that if I were not Michelangelo, I should prefer to be Albrecht Dürer than Emperor Charles V."



n 1520, during a visit to the court of the Holy Roman Emperor Charles V in Brussels, the artist Albrecht Dürer saw objects from another culture that took his breath away. He wrote in his journal:

Then I saw the things which were brought to the King from the new Land of Gold [Mexico]: an entire golden sun a full fathom wide, and likewise an entire silver moon equally as large, likewise two rooms full of armor of the people there, all kinds of wondrous weapons; most strange clothing, bedding and all sorts of marvelous objects for human use which are much more beautiful to behold than things spoken of in fairy tales.

These things were all so precious that they were valued at 100,000 florins. In all the days of my life I have seen nothing which so filled my heart with joy as these things. For I saw among them wondrous works of art, and I marveled over the subtle genius of those men in strange countries. Truly, I cannot tell enough of the things which I saw there before me.

Dürer was writing about some of the first objects brought from the New World to Europe by the Spanish Conquistador Hernán Cortés, presents from the Aztec leader Montezuma. Only a year earlier, the Spanish ships had arrived on the shore of Mexico. Montezuma believed at first that they were mountains that divine beings sailed on the seas. Cortés, his body covered in gleaming metal, was thought to be a legendary god returning—Quetzalcoatl, one of the gods who created the world. Montezuma was wrong about the ships but terribly right in his belief that the arrival of these divinities would mean the destruction of his empire. The riches that Cortés presented to Charles V were given to the conquistador in a futile effort to convince this divine being to spare Montezuma's people. Hundreds of messengers were sent back and forth to deliver huge objects of gold and silver to Cortés. Among the gifts were the treasures that the Aztecs had revered as belonging to Quetzalcoatl.

During the European Renaissance, the royal families and the Catholic Church first began building great collections of art. Charles V, who ruled an empire that stretched from Spain to Austria, was not the only collector of what has since become known as *Pre-Columbian* art. The Medicis of Italy and the Popes also added the treasures of the Americas to their collections. But, unfortunately, the primary goal for Cortés's patrons was not a love of art but simply of wealth. Cortés was sent to the Americas for silver, precious stones, and especially gold. By the mid-1500s, each year more gold was shipped to Europe from the New World than was mined in all of Europe.

Precious few of the golden artworks of the Aztecs like the ones that amazed Albrecht Dürer remain. A rare survivor depicts a great warrior (14-32). Beautifully crafted with intricate details, he wears ear, nose, and lip jewelry, which were common

GLOBAL VIEW



14-32 *Figure of a Warrior,* fourteenth to sixteenth century, Central Mexico, Aztec. Cast gold-silvercopper alloy, 11.2 cm × 6.1 cm. Cleveland Museum of Art. © Cleveland Museum of Art, Leonard C. Hanna, Jr. Fund. 1984.37

among high-born Aztecs. He carries a spear with a serpent's head in one hand and a shield and darts in the other. At the time of Cortés's arrival, the Aztec capital in Tenochtitlan had a population of 200,000, but the civilization was doomed. Its Great Temple, the center of its rituals and the empire, was destroyed and buried beneath the ground. A new Mexico City was soon built on its ruins and the land renamed New Spain.

Two hundred feet tall, The Great Temple of the Aztecs remained lost and buried for centuries. It was discovered by accident in 1978 during the excavations for a new subway line in Mexico City. In 1987, the Templo Mayor (Great Temple) Museum opened and exhibited many of the artifacts found at the site. One of its saddest objects is in its last room. It tells the tale of what happened to almost all of the golden statues and jewelry of the Aztecs. It is a foot-long bar of gold-one of thousands made by the Spanish from melted cultural treasures.

Hans Holbein and the Protestant Reformation

In one of his many treatises, Dürer included among a painter's most important responsibilities "to preserve the appearance of men after their death." A younger German, Hans Holbein, made that goal his main occupation and became one of the greatest portraitists who ever lived. He came from a family of painters and began his career after Dürer's mission to spread the influence of the Italian Renaissance had taken hold. Like Dürer, Holbein traveled to see the great Italian masterpieces firsthand, and by the time he was thirty years old, he had assimilated the learning of the Renaissance. Settling in Switzerland,

he painted beautiful altarpieces and was on his way to becoming the leading painter of the Germanspeaking world when that world, and Europe, suddenly changed profoundly.

The Protestant Reformation led by Martin Luther turned Europe upside down and had deep and pervasive effects on the art world, too. The rebellion against the Roman Church was sparked by the church's practices, like the sale of indulgences (which Pope Julius II had zealously promoted to pay for his new Saint Peter's). Northern Europeans were outraged by the idea that Christians could buy their way into heaven. Luther and his followers preached that Christians needed only faith and knowledge of the Bible to reach salvation, but the rise of the Protestant **14-33** Hans Holbein the Younger, *Portrait of Sir Thomas More*, 1527. Panel, $29\frac{1}{2}$ " \times 23 $\frac{3}{4}$ ".

Reformation came with a terrible cost for art and artists. There was a wave of *iconoclasm*—the destruction of religious imagery (Luther, a close friend of a painter, was horrified by this development). Many Protestants associated imagery not only with the Roman Church but, like the early Christians, with idolatry. All over northern Europe, Protestant mobs swept into churches destroying altarpieces, decapitating statues, and burning crucifixes. The lack of decoration in most Protestant churches today is a result of this darker side of the Reformation.

While most of his religious paintings were being destroyed, Holbein desperately looked for a safe haven where he could continue his career. He sailed to England and was given refuge by Sir Thomas More, a world-famous writer, scholar, and political leader. His Portrait of Sir Thomas More (14-33) was painted soon after Holbein's arrival when More was Speaker to the House of Commons. With meticulous detail, it shows an intelligent, dignified, and successful man wearing the symbol of his high office. The picture provides sensual pleasures as well. Holbein masterfully reproduces a variety of textures: More's soft hands, the stubble of his beard, red velvet, black satin, gleaming gold, and fur. Underlying all of Holbein's work is his marvelous drawing ability. We believe every detail without question; we are convinced this is how Sir Thomas More looked.

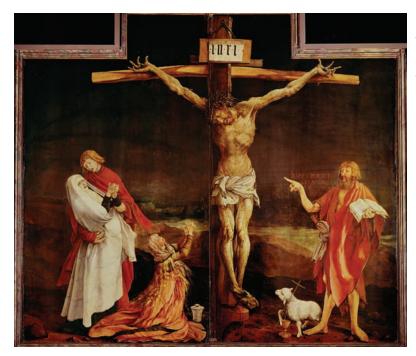
When the Reformation came to England, even powerful friends like More could not prevent the end of Holbein's career as a painter of religious art, but More helped Holbein become Henry VIII's court portraitist (see his portrait of the king in Chapter 1). He was a prolific painter, so even though he died of the plague at the relatively young age of forty-six, we have an almost firsthand acquaintance with the many members of the Tudor court.

If we compare Holbein's portrait of Sir Thomas More to Leonardo da Vinci's *Mona Lisa* (1-1, painted less than twenty-five years earlier), we can see some of the characteristic differences between northern and Italian Renaissance painting. Northern artists accentuated detail and crispness of edges, while in the south, a soft diffuse light—*sfumato*—eliminated definite edges. Interest in delineating fabrics, textures, and patterns precisely was the common feature in northern Renaissance art.



NORTHERN RENAISSANCE: THE DARKER SIDE

There are other differences between the two European Renaissances. For example, nobility of gesture, perfect proportion, and harmony are notably absent from Matthias Grünewald's Isenheim Altarpiece (14-34), a set of paintings that would have horrified an artist like Raphael. But the Northern artist's goals were quite different. Because it was designed for a hospital, Grünewald painted a crucified Christ that the suffering patients could identify with and pray to, a figure who seemed to express all possible human torments in his sickly-colored flesh and broken body. No matter what physical tortures the patients may have felt, this cruel masterpiece seems to say that Christ had already suffered the same. His body hangs heavily on the cross and his feet twist painfully; his expressive hands reach up in anguish. Grünewald portrays a massive crown of thorns upon Jesus's head and dried blood running down his sorecovered body.



14-34 Matthias Grünewald, *The Isenheim Altarpiece* (closed), Crucifixion (center panel), c. 1510–1515. Oil on wood, center panel 9′ 9½″ × 10′ 9″. Colmar, France.

Yet the crucifixion scene is only part of the altarpiece, which was made to unfold and open to reveal a series of images. Inside the picture of suffering and death is one of rebirth and resurrection (14-35). Here, Christ's body—now glowing white rather than sickly green—rises dramatically out of the grave. He holds out his hands with their stigmata (bloody signs of the nails that held Christ to the cross), as if proving that he is ultimately unhurt by his ordeal. These wounds are no longer sources of pain but now sources of light. All of the torture of the first scene has been replaced with triumph. Christ's face glows like a rising sun. Here, in Grünewald's Isenheim Altarpiece, you have the essence of the Christian doctrine of God's suffering and rebirth, the victory of good over evil. For the hospital's patients, this altarpiece was meant to replace fear of illness and death with a vision that inspired faith and hope.

During this period, there lived another northern artist whose pictures are among the most fantastic, weird, bizarre, and visionary of any age—Heironymus Bosch. We know little of his life, except it was quite unlike the experiences of the educated city dwellers Dürer and Holbein. His was the world of northern villages before the Reformation, where alchemy was an accepted practice, superstitions were unquestioned, and the Roman Church had its hands full trying to control the widespread use of magic. Preachers used pornographic images to make their points, and prostitutes could be seen at work in the churches.



14-35 Matthias Grünewald, *Resurrection*, detail of the inner right panel of the first opening of *The Isenheim Altarpiece*. Approximately 8' 8%" × 4' 63/4".



14-36 Hieronymus Bosch, triptych of *The Garden of Earthly Delights, Creation of Eve* (left wing), *The Garden of Earthly Delights* (center panel), *Hell* (right wing), 1505–1510. Oil on wood, center panel 86 %" × 76 ¾". Museo de Prado, Madrid.

Bosch cared little for the new ideals of Renaissance painting. He was interested in creating visions that taught moral lessons and used the achievements of the Renaissance only to help make his visions look more real. Most of Bosch's pictures are very symbolic and difficult to decipher. The Garden of Earthly Delights (14-36) is his greatest and most famous painting, but scholars are still trying to understand it. The left panel shows Christ introducing Adam and Eve in the garden of Eden before the Fall. The central panel (14-37) gives the triptych its name, showing the world after the Fall and symbolizing Bosch's era. The setting seems to be a park where nude men and women are indulging in pleasure, enjoying free and open sexuality. But Bosch is not celebrating this scene. What he wants to show is a false paradise. Bizarre acts are rampant, as revelers engage in acts restricted only by the limits of Bosch's fertile imagination.

After an orgy of false pleasures comes the right panel—Hell (14-38), a nightmare from which sinners can never wake. There is torture of all the senses and emotions. Buildings explode into flame in the background. In the foreground, a rabbit carries a victim on a pole, and blood spurts out of the victim's belly. A proud lady is forced to admire her reflection on the backside of a demon. Victims are crucified on a harp or stuck to a lute. A man tries to balance



14-37 Central Panel of figure 14-36, *The Garden of Earthly Delights.*



14-38 Right panel of figure 14-36, Hell.

on a giant skate and heads straight for a hole in the ice. A pair of ears with a giant knife proceeds like a tank, slicing up the damned (14-39). The dreamlike reality of the scene is most apparent in the Treeman, who has sinners in his hollow chest and arms rooted in the foundation of Hell. Is he Hell's monarch or another victim?

Surprisingly, the *Garden of Earthly Delights* was an altarpiece for a church. It was a kind of Last Judgment in an age when the Apocalypse was thought to be near. Bosch showed the results of humanity lost



14-39 Detail of figure 14-38.

to sin and warned that if people continued to live as they did, no one would be saved. Yet one can see little hope for humanity; lost in temporary pleasures, the people in the *Garden of Earthly Delights* give no thought to consequences or repentance. Michelangelo had a similar pessimistic vision thirty years later in his *Last Judgment* (14-26).

GENRE: SCENES FROM ORDINARY LIFE

Although Pieter Bruegel began his career with Bosch-inspired work, he eventually developed his own unique subject matter. Bruegel is best known for his paintings of country life. His Landscape with the Fall of Icarus (14-40) is an unusual retelling of the ancient Greek myth in a sixteenth-century Flemish setting. Icarus was the son of Daedalus, a clever artisan imprisoned by King Minos of Crete in a fabulous labyrinth (or maze) Daedalus had designed himself. To escape, the father fashioned wings of wax and feathers for his son and himself. He warned his son not to fly too close to the sun, but Icarus ignored him. When his wax wings melted, Icarus fell into the sea and was killed. Usually understood as a cautionary tale about blindly confident youth and reckless ambition, Bruegel presents the myth quite differently. Almost the entire picture is devoted to a scene of a typical day in the fields of Netherlands alongside the sea. The central figure is busy plowing; the plow is shown actually cutting and turning the heavy earth. This is far from the classically inspired mythological paintings of the Italian Renaissance, such as Botticelli's The Birth of Venus (14-9) or Raphael's The School of Athens (14-21). Imagine how an Italian artist would have portrayed the myth—a marvelous-looking boy filling the can-



14-40 Pieter Bruegel the Elder, *Landscape with the Fall of Icarus*, c. 1554–1555. Oil transferred from wood to canvas, 29" × 44 1/8". Musées royaux des Beaux–Arts de Belgique, Brussels (photo Speltdoorn).

vas as he tumbles through glorious sun-drenched skies. But here the plunge of Icarus to his death in the sea seems almost incidental to the picture. All we see of Icarus is two tiny legs making a small splash in the water. No one seems to notice the cosmic event. One man looks up, but in the wrong direction; the rest are just busy living their lives.

Bruegel's work is one of the first to use **genre** (ordinary and commonplace) subject matter. His approach to his subject is a statement that not only is our world worth portraying, but it is much more significant than an ancient myth. For most people, cosmic events have less importance than their own everyday concerns.

In Hunters in the Snow (14-41), a variety of typical winter activities is depicted: hunting with dogs, cooking on outdoor fires, and skating on the frozen pond. Bruegel's painting exhibits an almost perfect balance between the depiction of a subject—in this case, winter as experienced by Flemish peasants—and the formal arrangement of lines, shapes, and colors into a totally satisfying visual experience. The dark silhouettes against the pale snow of hunters, dogs, and trees create a wonderful rhythmic pattern; the icy blue and white of the landscape contrast with the glowing red fire. The line of the trees and the birds leads the viewer's eye irresistibly past the tired hunters and down the hill to the town below. We are able to share the temperature and tones of a winter day from four centuries ago because of Bruegel's mastery. He has allowed us to connect to the lives of people long gone and reminds us that we are all in a cycle of life. We feel that our experiences, like trudging along

in the snow, were experienced by past generations and will be for generations to come.

Although it is very different from Leonardo's or Michelangelo's masterpieces, *Hunters in the Snow* is not too distant from the work of Giotto that began the Renaissance. More than two hundred fifty years later, as the Renaissance comes to an end in Europe, Bruegel's pictures bring to a profound realization the humanistic advances of the old Italian master. It would be difficult to find finer examples of realistic space, true emotion, and above all, honestly portrayed human beings.



14-41 Pieter Bruegel the Elder, *Hunters in the Snow*, 1565. Oil on wood, approximately $46'' \times 64''$. Kunsthistorisches Museum, Vienna.

CHAPTER 5

Drama and Light: Mannerism, the Baroque, and Rococo

y the 1530s, with Raphael dead and Michelangelo returning to Florence, Rome was in the hands of a new generation of talented young artists. Yet it was a difficult time for them. The goals of the High Renaissance, already accomplished by Raphael and Michelangelo, did not seem to leave much room for other artists to become outstanding. The young men realized they could not repeat what had already been done, and even if they did, they would find it almost impossible to compete with those great masters. Italy was in a period of serious economic decline. Italian society had been disrupted by repeated invasions from northern Europe. Raphael's achievement of beauty, proportion, grace, and a sense of human virtue no longer seemed appropriate to the troubled times. The young artists decided to abandon the old goals and go beyond nature.

	PERIOD	HISTORICAL EVENTS	
1530-1600	End of the Renaissance Italian Mannerism The Counter Reformation The Scientific Revolution Court of Benin Mughal period in India	Council of Trent begins the Counter Reformation 1545–1563 Vasari publishes <i>Lives of the Artists</i> 1550 Mercator publishes map of the world for navigators 1569 Ottoman Turks win Cyprus from Venice 1573	Buried Roman city of Pompeii discovered 1592
1600-1715	First English settlements in North America The Baroque The Enlightenment in Europe Classicism	Shakespeare's Hamlet 1600 Tokugawa period begins in Japan 1603 African slaves brought to Virginia 1619 Galileo condemned by Inquisition 1633	Descartes, "I think therefore I am" 1637 Reign of Louis XIV 1643–1715 Isaac Newton presents the law of gravitation in <i>Principia</i> 1687 Parthenon damaged during Venetian attack 1687
1750-1790	Rococo Neoclassicism	J.S. Bach, <i>The Brandenburg</i> Concertos 1721 Handel's Messiah 1741 The American Revolution 1776–1783 The French Revolution begins 1787	

MANNERISM

In Parmigianino's Self-Portrait in a Convex Mirror (15-1), the young artist is clearly fascinated with the distortions of a mirror. Still, even if the results include a bizarrely oversized hand, the picture appears to be an objective recreation much as Leonardo might have done. But in Parmigianino's Madonna dal Collò Longo or Madonna of the Long Neck (15-2), there is a great deal that would have shocked Leonardo. The space is nothing like the realistic and accurate space created by Renaissance artists. Many of the figures are distorted, and true proportion is seemingly abandoned at whim (notice the tiny prophet at the bottom right). An unfinished column supports nothing. Even more disturbing is the image of the Virgin Mary, an aristocratic figure who holds the infant Jesus at a cool distance. Warmth and love, traditional to this theme, are noticeably absent. The smoothskinned angels seem like servants. The Christ child looks cadaverous and deformed.



15-1 Parmigianino, *Self-Portrait in a Convex Mirror*, c. 1523. Oil (?) on wood sphere, 15 %" diameter. Kunsthistorisches Museum, Vienna, Austria.

ART



Parmigianno, Madonna dal Còllo Longo 1535



Titian, Venus of Urbino 1538

Holbein, Henry the VIII 1540



Plaque showing King mounted with attendants, Benin sixteenth century



Palladio,Villa Rotonda 1566–1570



Bernini, *David* 1623



The Taj Mahal 1623–1647



Gentileschi, Judith and Maidservant with the Head of Holofernes c. 1625





Fountain of Apollo Versailles 1672–1674





Rigaud, Louis XIV 1701



Soufflot, Pantheon 1755–1790



Fragonard, The Swing 1766







15-2 Parmigianino, *Madonna dal Còllo Longo*, c. 1535. Oil on wood, approximately 7′ 1″ × 4′ 4″. Galleria degli Uffizi, Florence.

Commissioned for a church in Bologna, but never actually presented to his patrons, Parmigianino's strange seven-foot-tall painting is characteristic of a new style called **Mannerism**. Instead of picturing inner and outer realism, Mannerist artists produced demonstrations of their inventiveness and refinement. Their highest goal, which Parmigianino exemplified, was elegance. In Mannerist works, the subject is rarely important and functions only as an excuse for a painting or sculpture. Emotions are ignored for the sake of elegance and what was called "style." The perfect balance of High Renaissance painting had been exchanged for unique, strange compositions, a kind of artful choreography.

One artist of the time wrote:

in all your works you should introduce at least one figure that is all distorted, ambiguous and difficult, so that you shall thereby be noticed as outstanding by those who understand the finer points of art.

The Mannerists believed the body was most elegant when posed so the limbs and torso resembled the letter *S*. They called this pose the **serpentinata**, or the twisting of a live snake in motion. Many of the distortions in the *Madonna dal Collò Longo* are caused by the characters being forced to conform to S-like shapes.

Federico Zuccaro's portal of the *Palazetto Zuccari* in Rome (3-4) is an example of the Mannerist spirit in architecture. The wild conception of an entrance as a giant mouth leading into a long gullet of a hallway was the kind of idea that intellectuals of the time would call "the modern way."

THE COUNTER-REFORMATION AND TINTORETTO

The Mannerist period was relatively brief. It disappeared at the start of the **Counter-Reformation**, the Roman Catholic Church's attempt to combat the Protestant Reformation that had swept through much of Europe during the early sixteenth century. In 1545, Pope Paul III convened the *Council of Trent* to recommend changes in church policy and new initiatives. Abuses of the past, such as the sale of indulgences, were eliminated. Because the arts were considered one of the most important arenas for fighting against Protestantism, the Catholic Church encouraged a new vitality in Christian art and decoration. It proclaimed the need for art that would entertain and electrify the faithful.

Pictures like the *Madonna dal Collò Longo*, not surprisingly, were considered offensive and decadent by religious leaders who were concerned with the revival of Catholic values. Still, while short-lived, Mannerism served as an important link between the Renaissance and the next great period of art—the **Baroque**. The Venetian artist Jacopo Robusti, known as *Tintoretto*, also bridges this gap and reflects the dynamic spirit of the Counter-Reformation. Elegance and beauty were not enough for this painter; he wanted his pictures to be exciting, to make the biblical stories live. His goal was to combine Titian's rich color with the vigorous drawing and design of Michelangelo.



15-3 Tintoretto, *The Last Supper*, 1594. Oil on canvas, 12' × 18' 8". Chancel, San Giorgio Maggiore, Venice.

Tintoretto's pictures are dramatic. His The Last Supper (15-3) is far from a mannerist composition like the Madonna dal Collò Longo, with effete, elongated figures arranged in limp poses. Instead, it is full of energy, opposing motions, and swirling lines. Tintoretto was known as il furioso for his speed as a painter; this nickname is appropriate to the spirit of his works, too. If we compare Tintoretto's Last Supper to Leonardo's (14-16), we will see clearly the difference between an early Baroque and a Renaissance interpretation of the same subject. Leonardo's fresco, painted almost one hundred years before, is harmonious and balanced. The light is natural. The geometry of the room is stressed, and the composition arranged so Christ is at its perfect center. The table on which the story of the last supper is being acted out is a simple horizontal band; the focus of the picture is on the poses of the characters, which seem frozen in time. Leonardo chose to illustrate the human side of the story, the moment when Christ predicts his betrayal by one of his apostles.

Tintoretto's version is totally different. The first visual element we notice is the energetic diagonal of the table, plunging back into space. Christ is not a static, stationary figure, nor is he the clear center of the composition. He stands about halfway down the table, handing out bread. We can distinguish him because his halo bursts forth from his head like a sun (Leonardo's Christ has no painted halo). The heads of disciples also glow against the rich, smoky darkness of the room. The only natural, rather than supernatural, light source is a hanging lamp that emits twisted tongues of flame and coils of smoke. This smoke is transformed into angels, outlined only in white paint, as if drawn on a chalkboard. In the foreground of the picture, Tintoretto has added everyday events, like the servants clearing away food and a cat looking into a basket. This normal scene makes the rest of the picture seem even more miraculous by contrast.

In his painting, Tintoretto has chosen to focus not on the human drama of the betrayal of Judas but on the supernatural meaning of the Last Supper. As he passed out the bread at his last meal with the disciples, Jesus said: "This is my body which is given for you; do this in remembrance of me." This theme was particularly important at the time of the Reformation, because the Protestants claimed that during the Mass (communion service), bread and wine

only symbolized Christ's body and blood and were not miraculously changed into his actual body and blood, as the Catholic Church taught.

We can see in the work of Tintoretto many of the attributes that were new to the Baroque movement: its dramatic use of light and dark, its preference for dynamic movement and theatrical effects, and the inclusion of elements of ordinary life in religious scenes.

THE BAROQUE PERIOD

The period of the Baroque (generally defined as spanning the years 1575 to 1750) was one of great confusion. Everything from the place of the earth in the universe to the place of the individual in society was being reconsidered. People questioned authority in religion, in government, in science, and in thought. One of the great thinkers of the time was the Frenchman René Descartes, who began his philosophical inquiry by doubting the existence of anything, including himself. The scientist Galileo used a telescope to study the heavens and declared in 1632 that the earth was not the center of the universe. The Catholic Church was so upset by his discoveries, which appeared to contradict the wisdom

of the ages and the Bible itself, that he was forced to renounce them on pain of possible torture and death. England, a Protestant country, was more open to scientific discoveries. There, Sir Isaac Newton began a new era in science when he published his *Principia* in 1687, which announced, among other important physical laws, his discovery of the laws of gravity.

The great age of European exploration and discovery was coming to a close, but an active period of colonization and world trade followed. Borders were changing. Great conflicts were taking place in Europe: bloody wars, rebellions, intense religious disputes, and persecutions.

El Greco

When Domenikos Theotokopoulos, known as *El Greco*, arrived in Spain around 1576, the Spanish Empire was at its very height as a great military and colonial power, but its art was backward and provincial. There had been no great Spanish artists during the Renaissance. Born on the Greek island of Crete, this young man had been trained as an apprentice to make icons, or religious images, in the centuries-old Byzantine style. At the age of twenty, Domenikos Theotokopoulos went to Venice, where he absorbed the lessons of the great Venetian masters Titian and



15-4 El Greco, *Purification of the Temple*, 1600. Oil on panel, 3' $6'' \times 4'$ 3''. National Gallery, London.



15-5 El Greco, The Agony in the Garden, c. 1590–1595. Oil on canvas, $40\frac{1}{4}$ " × $44\frac{3}{4}$ ". National Gallery, London.

Tintoretto: their light, color, and energy. He then visited Rome and fell under the influence of Mannerism, especially its elongated, distorted figures. Like Tintoretto, El Greco is sometimes categorized as a Mannerist and, like Parmigianino, he had certainly learned to use the tool of distortion. But his work is not cool and refined; it is intensely emotional and wholeheartedly committed to the goals of the Counter-Reformation.

The Purification of the Temple (15-4) is a good example of El Greco's mature style. Christ comes thundering in to purify the temple in Jerusalem. The figures on either side pull away and are distorted, as if by the shock waves of Christ's anger. On the left are the lower-class peddlers who react physically to Christ, cringing and trying to protect themselves. Their limbs are arranged in sharp angles; they take strange and twisted poses. On the right are the Jewish elders who react mentally rather than physically, intensely discussing Jesus's actions. The entire picture stresses dynamic

diagonal lines rather than the calmer verticals and horizontals favored by Renaissance artists. Even the folds of the costume's drapery are angular and sharp. El Greco's brushstrokes are bolder than those of his contemporaries, giving his paintings a rough, active—rather than smooth and calm—surface.

In some of El Greco's paintings, reality is almost completely ignored in favor of creating a spiritual world. These visions appear modern to our eyes, and, in fact, El Greco became more famous and popular in the twentieth century than he was in any of the intervening centuries since his own time. In *The Agony in the Garden* (15-5), deep religious feeling seems to heave up the very ground on which Christ kneels. The figures are wrapped in strange, swirling cocoons—rocks, clouds, drapery all resemble each other, framing and isolating Christ, the angel, and the sleeping disciples. El Greco gave up the truth of the eyes for an inner truth. The Renaissance is now far behind us.



15-6 Caravaggio, *The Supper at Emmaus*, c. 1598. Oil on canvas, $55\frac{1}{2}'' \times 77\frac{1}{4}''$. National Gallery, London.

Caravaggio and Naturalism

As Mannerism declined in Rome, a new artist emerged who would become a brilliant innovator. This painter had grown up in northern Italy, where painting traditions were less influenced by the Renaissance desire for perfection and harmony, and a style of greater realism prevailed. Michelangelo de Merisi, called *Caravaggio* after the small town where he grew up, became the greatest Italian painter of the seventeenth century and one of the most influential of the entire Baroque period.

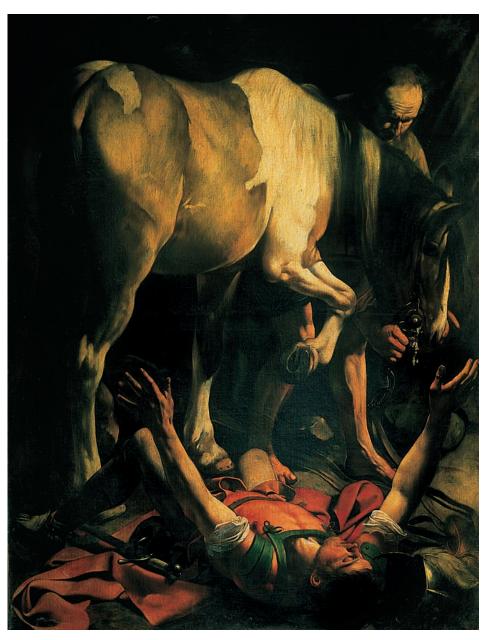
Caravaggio was orphaned at the age of eleven and came to Rome when he was seventeen. This exceptionally talented artist was also an outsider and soon considered a violent, unpredictable rebel. In *The Supper at Emmaus* (15-6), Christ and his attendants are depicted as real working-class people, with torn clothing and worn faces. This New Testament story takes place after Christ's resurrection, but before his followers realize that he has truly risen from the dead. Two of the disciples were on the road to Emmaus, a

small town outside Jerusalem, and were joined by a stranger whom they did not realize was Jesus because "their eyes were kept from recognizing him." Stopping in the village, they urged their fellow traveler to stay with them overnight. As they sat down to eat, Christ "took bread, and blessed it, and broke it, and gave it to them" in a reenactment of the Last Supper. At this point "their eyes were opened, and they knew him." It is this very moment of illumination that Caravaggio chose to illustrate.

The architecture of the room, so important in Renaissance paintings, has been eliminated here in favor of the flat backdrop of a wall. The viewer is quite close to the figures, who make dramatic gestures that almost seem to leap out of the picture into real space. For instance, the man on the left, whom we see from the rear (a favorite visual device of Carravagio's, allowing us the illusion of peeking into a real scene) is about to push his chair backward, and his elbows jut toward us as if they might break through the canvas. On the right, an elderly apostle thrusts out his hand in a dramatic gesture, like an

actor on the stage. But the most theatrical effects are provided by the stark lighting—illuminating the face of Jesus, accentuating the wrinkles of the careworn faces, focusing our attention on the most important gestures, and casting dark shadows on the wall behind Christ's head in a "reverse" halo.

Consider how different this painting is from the work that preceded it, even the work of Tintoretto and El Greco. Here, although a miraculous event is taking place, there are no supernatural halos or angels, no distortions, just ordinary people pains-takingly observed. Caravaggio shares with Titian and El Greco, however, his taste for dramatic and theatrical effects, a taste that is typically Baroque. In *The Conversion of Saint Paul* (15-7), he topples the figure of the saint directly toward the viewer, his head almost touching the bottom edge of the canvas. The dramatic action of the scene seems to be frozen by a flash of light—the horse's hoof is shown in midair.



15-7 Caravaggio, *The Conversion of Saint Paul*, c. 1601. Oil on canvas, approximately 7' $6'' \times 5'$ 9''. Chapel, Santa Maria del Popolo, Rome.

Saul was a Roman citizen who delighted in persecuting the early Christians. On the road to Damascus—a city in Syria where he was headed to continue his persecutions—he experienced a vision. In his own words: "Suddenly there shown from heaven a great light all about me, and I fell to the ground." Then Saul heard the voice of Jesus asking, "Why do you persecute me?!" and directing him to go to Damascus. Blinded by his experience, Saul had to be led into the city, where he met a devout Christian and was converted and baptized. He took the name of Paul and became the greatest leader, writer, and theologian of the early Christian Church.

Here we see a mystical moment portrayed with high realism. Saul has just hit the hard ground and lies as if in a trance, listening to the voice of Jesus. The New Testament account states that although they saw the light, the men who accompanied Saul could not hear this miraculous voice. True to the story, Caravaggio pictures a horse and servant drawing back in surprise, unsure of what is going on. Miraculous light is a perfect subject for Caravaggio, who, as we saw in The Supper at Emmaus and in The Sacrifice of Isaac (2-11), had been using the power of light symbolically in his paintings to indicate supernatural happenings. Caravaggio's use of chiaroscuro, the dramatic contrast of light and dark, would influence many artists and would be copied throughout Europe.

Caravaggio was condemned by the art critics of his time as a "naturalist," while his religious paintings were condemned by the clergy. Some said that his way of painting meant the end of painting. They felt that his use of working-class people to portray the apostles and Christ himself was offensive, even sacrilegious, despite the fact that Christ and his followers had actually been poor, simple men and women. The controversy over Caravaggio's pictures reflects a difference of opinion about what the correct style for Counter-Reformation painting should be. While some admired his revolutionary honesty and directness, other critics felt that Caravaggio's work did not serve to promote the Catholic faith. The most powerful members of the Roman establishment the papal court, for example—preferred artists who simply glorified the church and its saints.

Caravaggio lived only thirty-nine years (he died of malaria after being banished from Rome by the pope), but he left behind a great body of work that influenced artists during the entire Baroque period. His revolutionary naturalism and dramatic use of chiaroscuro light would prove to be one of

the strongest legacies in the history of art. Among the many great artists who learned from his work were Velázquez in Spain, Rubens in Flanders, and Rembrandt in Holland, but first we will discuss his direct influence on another Italian painter, Artemisia Gentileschi, who also suffered from the prejudices of Roman society, although for different reasons.

Artemisia Gentileschi: The Spread of *Tenebroso*

Most women artists of the Baroque period were the daughters of painters; for example, Tintoretto had a favorite daughter who acted as an assistant on many of his huge canvases. Artemisia Gentileschi's father, Orazio, was a talented follower of Caravaggio and taught her many of his techniques. Most of Gentileschi's pictures show women as biblical or mythological heroines. One reason Gentileschi specialized in the female figure was that she was easily able to find models and to study female anatomy in great detail. It would have been considered improper for her to study the nude male figure; this limitation hampered female artists until the twentieth century.

The Old Testament story of Judith and Holofornes was one that Gentileschi painted several times. Holofornes was an Assyrian general who laid siege to an Israelite city. To save her town from the attacking general, Judith dressed in her most beautiful clothes, then crept with her maid behind enemy lines. They were soon captured and taken to the tent of the general. He was attracted to Judith and invited her to dine. She drank with him until he was unconscious, and when he passed out, she took his sword and, with the help of her maid, chopped his head off. Judith and the maid then escaped, and the next morning displayed the head of Holofornes on the city walls, sending his invading army into panic and retreat.

Some critics speculate that Gentileschi's attraction to this theme of feminine revenge was the result of an unfortunate experience early in her career. When she was a young woman, her father arranged for her to be tutored in perspective by another painter named Tassi, who raped her several times, and then promised to marry her. Her father took this man to court, not only for raping his daughter, but also for stealing some of his pictures (Tassi had already been convicted of arranging the murder of his own wife). During the trial, Artemisia was tortured on the witness stand with thumb screws—a primitive type of lie detector. To add to her humiliation, the

rapist was jailed only a few months, and then eventually acquitted. After the trial, Gentileschi married a man from Florence and left Rome for the next ten years. Strangely, because of this episode in her life, throughout history she has had the reputation of a wanton woman.

Other critics dismiss the importance of her early traumatic experience and point out that the subject of Judith and Holofernes was a common one of the period for male and female painters. No one can deny, however, that Gentileschi brought an unusual passion and realism to her versions of the theme (she painted at least six). In an earlier version, Gentileschi chose the gruesome moment of the actual decapitation. In the later picture, considered her masterpiece, Judith and Maidservant with the Head of Holofernes (15-8), the artist chose instead to imagine the time after the general has been murdered, when Judith and her maid are waiting to escape from the enemy stronghold. It is a huge work, more than six feet tall, so the figures are larger than life-size. Gentileschi has used a single light source—a candle flame—then interrupted it with Judith's raised hand, so it throws weird shadows on her figure. The mood is suspenseful. We glimpse the figures as they pause in the midst of their secret crime, perhaps hearing a sound and fearing discovery. Judith covers the candlelight calmly, holding her sword in readiness, while the maid tries to cover the head.

This is a painting in the **tenebroso**, or dark manner. The followers of Caravaggio who specialized in such night scenes were known at the time as *Caravaggisti*. Gentileschi was not only one of the Caravaggisti, but she also spread the style throughout Italy as she moved from Rome to Florence, back to Rome, and on to Naples, visiting Genoa and Venice as well. Through the influence of Caravaggio and followers like Gentileschi, the Baroque style became truly an international art movement.

Bernini

In contrast to the unfortunate Caravaggio, Gianlorenzo Bernini was a highly successful and internationally famous architect and sculptor. Only Michelangelo was ever held in as high esteem by popes, the powerful, wealthy art patrons, and other artists. Like Michelangelo, Bernini was a brilliant sculptor in marble, but he was also a painter, architect, and poet. Unlike Michelangelo, Bernini was known for his great charm and wit; he was fond of people and a good husband and father.



15-8 Artemisia Gentileschi, *Judith and Maidservant with the Head of Holofernes, c.* 1625. Oil on canvas, approximately $6' \times 4'$ 8". Detroit Institute of the Arts (gift of Leslie H. Green).

Bernini was only twenty-five or so when he sculpted David (15-9), one of his masterpieces. Just as the contrast between Tintoretto's Last Supper and Leonardo's can be used to illustrate the differences between Renaissance and Baroque painting, one can see the changes in sculpture by comparing Bernini's David with Michelangelo's (14-18). Both were tours de force, carved when the artists were in their twenties. Unlike Bernini, Michelangelo strove for harmony and the ideal beauty of a perfect young man. His enormous statue (more than fourteen feet tall) is in elegant proportion; the figure stands motionless, self-contained. But Bernini's David is captured at a specific moment—the split second before he releases his slingshot at the giant Goliath. There is great dynamic energy in this figure, the first version of David to show the subject in motion. Bernini's David is a mature man who contorts his less-thanideal features into a grimace of concentration as he



15-9 Gianlorenzo Bernini, *David*, 1623. Marble, life-size. Galleria Borghese, Rome.

puts total effort into his coming shot. The statue's gaze is so intense that the unseen Goliath becomes part of the sculpture. In this way Bernini breaks down the barrier between art and the real world. Realistic details also make the biblical event convincing. As in his *Apollo and Daphne* (9-5), Bernini skillfully creates a variety of textures in stone (flesh, drapery, leaves, and hair), as well as incredibly minute work like the taut rope of the sling. The differences between the two Davids are reminiscent of the contrast between calm and balanced Classical sculpture, such as the *Doryphoros* (12-17), and the writhing motion typical of later Hellenistic sculpture like the *Laocoon* (12-21).

The type of work for which Bernini became most famous was not the sculpting of individual statues, however powerful, but the creation of total artistic environments. The Ecstasy of Saint Theresa (15-10, 15-11), which combines sculpture with architecture and painting, was designed for a chapel in the small Roman church of Santa Maria della Vittoria. The materials include white marble, colored marble, gilded bronze, stucco, fresco, and stained glass. Here, the effect of the whole is far greater than the sum of the parts. The ceiling of the chapel is decorated with a fresco of angels frolicking on billowing clouds. To the sides, statues of the Cornaro family members observe the scene from boxes, as if at the opera. At center stage is Bernini's marble statue of Saint Theresa in ecstasy.

Saint Theresa of Avila was a sixteenth-century Spanish nun and mystic who lived about the time that El Greco was painting in Spain. Through her widely circulated writings, she became an important



15-10 Gianlorenzo Bernini, *The Ecstasy of Saint Theresa*, 1645–1652. Marble, group 11′ 6″ high. Cornaro Chapel, Santa Maria della Vittoria, Rome.



15-11 Gianlorenzo Bernini, interior of the Cornaro Chapel, 1645–1652, Santa Maria della Vittoria, Rome. Eighteenth-century painting, Staatliches Museum, Schwerin, Germany.

saint of the Counter-Reformation. Many of these writings describe her personal, mystic visions. For this chapel, Bernini illustrated a spectacular vision of a visit from an angel, about which Saint Theresa wrote:

In his hands I saw a great golden spear and at the iron tip there appeared to be a point of fire. This he plunged into my heart ... again and again and left me utterly con-

sumed by the great love of God. The pain was so acute that I groaned aloud several times; yet the pain was so sweet that no one would wish to have it go away.

Bernini mixes realism and illusion here just as he mixes media. He shows Saint Theresa's spiritual passion as physical: Her head lolls to one side in rapture, her body falls back limp, her bare foot escapes from beneath her voluminous habit. Even her clothing

writhes in excitement. The intensity of this realism rivets our attention. But Bernini is also a great master of light and illusion. By flooding his statue in a stream of "heavenly" light from above (through a hidden window of yellow stained glass), he sets the statue of saint and angel off in a special space—a miraculous, visionary dream world.

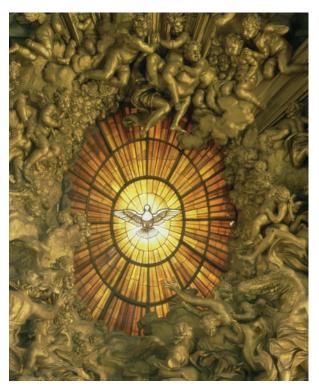
Bernini's greatest impact was on Saint Peter's Basilica, seat of the popes. As we learned in Chapter 10, Bernini designed the enormous courtyard or **piazza** (10-40) in front of the basilica that set Saint Peter's off from the surrounding confusion and created a courtyard that is calm, orderly, and logical. While Bernini's design altered the effect of the Saint Peter's exterior considerably, his influence inside Saint Peter's was even greater. For example, the *Throne of*



15-12 Gianlorenzo Bernini, *Throne of Saint Peter*, 1656–1666. Gilded bronze, marble, stucco, and stained glass. Saint Peter's, Rome.

Saint Peter (15-12) brings a heavenly host of angels and cherubs down into the church. Constructed of gilded bronze, marble, stucco, and stained glass, it is the visual climax of Saint Peter's. The throne is a reliquary, enshrining what was supposed to be the actual throne of Peter. As in Bernini's vision of Saint Theresa, light streams onto the sculpture through a stained-glass window, which shows the dove of the Holy Ghost (detail, 15-13). Saint Augustine and Saint Ambrose, the two fathers of the Catholic Church, support the front of the throne, while two fathers of the Greek Orthodox Church are relegated to the back. Because of the immense size of Saint Peter's, Bernini's colossal work actually manages to make the scale of Saint Peter's more human.

The theatricality and energy of Bernini and his dramatic use of light and space are attributes we have seen in the paintings of El Greco, Tintoretto, and Caravaggio. There was a love of illusion, gorgeous materials, and exuberant effects in the Baroque period. Artists of the Baroque era used architecture, sculpture, and painting together to give reality to the visions they were trying to create. Through these works, they allowed the faithful to see heaven, not just imagine it, and actually attempted to bring heaven down to earth.



15-13 Detail of figure 15-12.

GLOBAL VIEW

Mexican Baroque

hile the Baroque style of painting spread through Europe, the Baroque style of architecture and architectural decoration spread throughout the world, becoming the first truly international style of architecture. This was a result of the global Spanish Empire, where militant colonialism combined with intense missionary efforts to convert native populations to Roman Catholicism. The energy and building programs of the Counter-Reformation were brought by the missionaries, who followed the Spanish conquistadors to Mexico, Central and South America, as well as the Philippines in Asia. In the seventeenth and eighteenth centuries, magnificent cathedrals, churches, and chapels in the Baroque manner were built across New Spain, and eventually exceeded European models in the exuberance of their decoration.

The Metropolitan Cathedral in Mexico City is the largest cathedral in the Western Hemisphere. Attached to its side is the Sagrario Metropolitano (15-14), whose façade represents an outstanding example of the Mexican *Churrigueresque* architecture. The name comes from a Spanish Baroque architect, Jose Benito Churriguera, who developed and popularized the lavish style,



15-14 Metropolitan Cathedral in Mexico City.

filling all available space with a variety of ornament. In Latin America, architects like Lorenzo Rodriguez (who designed the Sagrario) adapted the Spanish Baroque to local materials and tastes, and the talents of local artists.

The interiors of such ultra-Baroque churches can be even more fabulous. The church of Santo Domingo in the southern Mexican state of Oaxaca, for example, is encrusted with decoration in stucco, painted in bright colors, and gilded with gold leaf (15-15). The statues and other carvings seen here are not cut out of stone like those on medieval cathedrals, but modeled out of damp plaster. The ceiling is decorated with an elaborate family tree of Domingo de Guzmán, the founder of the Dominican order. Its Chapel of the Rosary (15-16) glitters with twisted golden columns and a magnificent gilded *retalbo* (the shelf behind the altar) for the figure of the Virgin.

A GLOBAL VIEW



15-15 Interior, Santo Domingo de Guzman, Oaxaca, Mexico.

The church's main altar is covered with more than sixty thousand sheets of gold leaf and devoted to the Virgin of Guadalupe, the patron saint of Mexico. Each sunset, during the late afternoon mass, light pours in through the choir window, so that the entire church glows with a heavenly light and no space seems to remain unadorned. No wonder the British writer Aldous Huxley described it as "one of the most extravagantly gorgeous churches in the world." Here the Baroque reached its furthest extreme.



15-16 Chapel of the Rosary, Church of Santo Domingo de Guzman, Oaxaca, Mexico.

Baroque Naturalism in Spain: Velázquez

The greatest master of Spanish painting and one of the greatest painters of the Baroque was Diego Velázquez. Inspired by the simple, realistic paintings of Caravaggio, his approach to art flew in the face of the flamboyant trends popular in his day and went even further in the direction of naturalism. Surprisingly, when he was twenty-four, the honest realist was appointed the court painter to the king.

More surprisingly, Velázquez succeeded in his new role without changing his approach. Even though he never flattered the royal family, he was made a court chamberlain and given the rare honor of a home attached to the palace with its own studio. For thirty years, he painted King Philip IV, his family, and members of the court.

Las Meninas (15-17) is Velázquez's great masterpiece, a huge work, ten and one-half by nine feet tall. It demonstrates a mastery of realism that has seldom been surpassed. Here he shows a moment in the



15-17 Diego Velázquez, *Las Meninas*, 1656. Oil on canvas, approximately 10′ 5″ × 9′. Museo del Prado, Madrid.



15-18 Detail of figure 15-17.

life of the court. Because Velázquez is an important member of that court, he shows himself painting a picture. But what is he painting? There are two possible answers. It might be a portrait of the princess, who is in the center of the picture (and therefore the painting we are looking at), or it is the king and queen, whose reflections we can see in the mirror at the back of the room. In either case, it is a life-size portrait of the royal family and their attendants. At the center are the Infanta Margarita (detail, 15-18) with her maids of honor, a dog, a dwarf, and a midget. The Spanish royal family had a tradition of keeping dwarves and midgets around them, almost as toys, for entertainment. Velázquez always portrayed them with sympathy and respect, rather than as victims or clowns. Perhaps he felt that his situation was not so different from their own. In the background, a court official pauses to glance back through the doorway. Notice how the painter honors the viewer by giving us the same viewpoint as the king and queen.

Velázquez, unlike the northern Renaissance artists van Eyck and Holbein, did not attain realism by observing and copying minute details. Instead, he captures the impression of realism through suggestive brushstrokes, a method that would influence not only other Baroque painters but also the

Impressionists of the nineteenth century. The hair and corsage of the princess, for instance, are painted in loosely rather than reproduced line by line (15-18). Yet, if one steps back to view the entire scene, it is as if the strokes come together to produce an extremely convincing impression of reality. To use a second example, Velázquez's dog looks much more real than the dog in van Eyck's *Giovanni Arnolfini and His Bride* (14-29), even though the artist has not taken the trouble to paint it hair by hair. He paints what he sees rather than what he knows intellectually is there (we do not see every hair on a dog from across the room). In this way, he can create an illusion of reality that is actually more vivid than an enormously detailed work.

THE BAROQUE PERIOD IN THE NORTH

The fortunes of Spain and its territory, the Netherlands, were linked during the Baroque period. The Netherlands was particularly important to the Spanish Empire because it had many important centers of trade. But the Protestant cities of the Netherlands longed for political independence and religious freedom from their devout Catholic rulers. In the 1620s, the Netherlands was plunged into civil war. The rebellion ultimately succeeded in driving the Spanish from the northern half of the Netherlands, which became the Dutch Republic, an independent Protestant state. The south, Flanders, whose people were predominantly Roman Catholic, remained a territory of Spain. This division of the Netherlands is approximately the division of Holland and Belgium of today (see map).

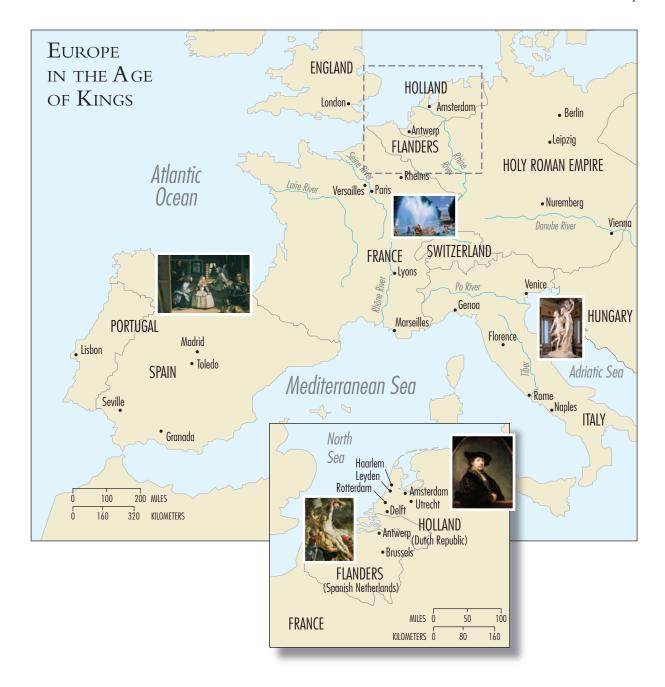
Rubens

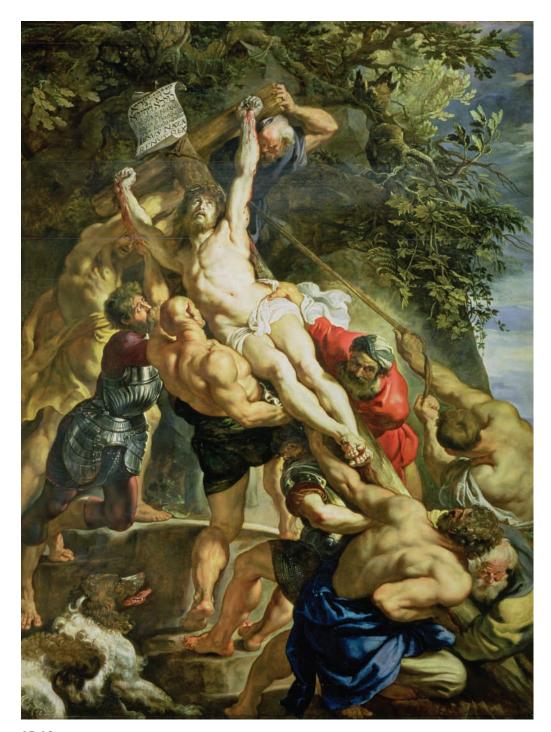
During this period, an artist from Flanders, Peter Paul Rubens, spent months in the Spanish court as a diplomat and befriended the younger painter Velázquez. They studied the Spanish royal art collection together. Velázquez felt honored to accompany the man he thought of as the model of a learned painter. Besides being the most learned, Rubens was also the most popular, most successful, and most internationally famous artist of the Baroque age.

Like many northern painters, Rubens gloried in the textures of real things and portrayed in fine detail leaves, flesh, and clothing. But he was profoundly influenced by a trip to Italy when he was twenty-three. Remaining eight years, he filled his notebooks, many of which have survived, with studies of the great masters. *The Elevation of the Cross* (15-19) was painted soon after Rubens returned to Flanders. We can recognize the rich color of the Venetians and the active, muscular figures of Michelangelo, as well as the dramatic lighting of Caravaggio—a potent combination. As the men strain and pull, they exhibit extraordinary muscular vitality. The strong diagonal of the cross and the many directions of activity are brought to a dynamic equilibrium by the young master.

Rubens completed Albrecht Dürer's mission of a century earlier and created a synthesis of the northern and southern European painting styles. Before Rubens, painters in the north had mostly painted on a small scale. *The Elevation of the Cross,* like much of his work, is enormous, more than fifteen feet tall. Rubens's grand, powerful religious pictures suited the Catholic Church's desire to regain its past strength during the Counter-Reformation.

Rubens's art has a buoyant energy, a love of splendor that also made it perfect for the rich and aristocratic courts of Europe. He received commissions from all of the Catholic monarchs in Europe





15-19 Peter Paul Rubens, *The Elevation of the Cross*, 1610. Oil on canvas, 15′ 2″ × 11′ 2″. Antwerp Cathedral, Belgium.

and was even knighted in England. The Arrival of Marie de' Medici at Marseilles (15-20) shows why his work was so popular with the powerful. The arrival of a young Italian princess to marry King Henry IV of France is extravagantly pictured. Rubens makes it a mythic, exciting event. The swirling figures and the

decoration give the picture great vitality. There are no Christian symbols, even though it celebrates the union of Henry and the Catholic princess Marie de' Medici. Instead, pagan gods and goddesses surround the scene as if they arranged the union. Fame flies above trumpeting the great news.



15-20 Peter Paul Rubens, *Arrival of Marie de' Medici at Marseilles*, 1622–1625. Oil on canvas, 61" × 452/3". Louvre, Paris.

Rubens lived like no painter before him. He had an excellent education and spoke many languages fluently. When he traveled from country to country in Catholic Europe, besides painting portraits, he acted as an official diplomat for Flanders and the Spanish king on matters of the highest importance. Respected and successful, he was a very rich and happy man who dominated the Catholic art world. Rubens was also a loving husband and father who recorded his family in many pictures. Self-Portrait with Isabella Brant (15-21) was painted on the occasion of his wedding. Modest in comparison with the mythic arrival of Marie de' Medici, it portrays a young couple of substantial means whose relationship combines love and mutual pride. Their hands touch gently as they sit surrounded by honeysuckle, whose textures are delicately portrayed.

Rubens was a painter who loved not only the souls of women but also their flesh. In terms of today's standards of athletic slimness, his females may appear unattractively pudgy, but in the world of the seventeenth century, starvation was more to be feared than excess weight. Plumpness was a sign

of wealth and upper-class status. For Rubens, it was also a glory of nature. Today, these proportions are often described as Rubenesque. In the Garden of Love (15-22), his pink-cheeked, double-chinned, dimpled females seem to promise all the delights of the flesh to their devoted swains. Some even glance provocatively at the viewer, almost enticing one to enter the world where they recline languorously on the grass or stroll with their arms about each other's waists. There is nothing pornographic or openly erotic in this scene, yet it is clearly a celebration of physical rather than spiritual love. At the time he painted this picture, the widower Rubens (in his fifties) had just married his second wife, a lovely girl of sixteen. You can see them at the left of the picture, where a cupid pushes her into his arms.

Rubens's home in Antwerp (pictured in the *Garden of Love* and still standing) could easily be mistaken



15-21 Peter Paul Rubens, *Self-Portrait with Isabella Brant*, 1609–1610. Oil on canvas, $69'' \times 53 \frac{1}{2}''$. Alte Pinakothek, Munich.



15-22 Peter Paul Rubens, Garden of Love, c. 1632–1634. Oil on canvas, 6' 6" × 9' 3½". Museo del Prado, Madrid.

for a palace. Attached to it was a huge workshop with many assistants, functioning like a painting factory in Rubens's time. He charged clients by the size of each painting and how much he had worked on it. Because the quantity of commissions he was offered could never have been accomplished by a single man in one lifetime (or even three), most of the talented artists of Flanders worked in the Rubens workshop.

The Dutch Republic

The art world of the Dutch Republic was very different from the one Rubens dominated. The art of the Protestants of northern Netherlands was entirely different, as was their art market. The Protestant Church did not patronize artists, and there was no large wealthy aristocracy. Holland was governed by a bourgeois, middle-class society of merchants. In this atmosphere, an art reflecting middle-class life began to flourish. Dutch painting became concerned with the everyday life of the towns, and with portraits. In Holland, the humanistic development of art that began in the fourteenth century with Giotto reached its climax in a profound naturalism. One of the most accomplished masters of the beauty of simple scenes was Jan Vermeer.

In Vermeer's work, as in that of his fellow countryman's, the Renaissance painter Bruegel, we see an everyday event raised to a high artistic plane. *Young*

Woman with a Water Jug (15-23) is an extraordinary work of art. The subject of a woman standing at a window holding a pitcher in her hand is utterly simple, and one Vermeer used more than once. What is unique about this painting is the combination of vivid realism and idealism. The realism is seen in the artist's ability to depict textures flawlessly. The rug appears thick and shaggy; the design is clearly woven into the fabric rather than drawn on top. The silver of the pitcher and bowl reflect the rug exactly as they would in real life. The woman's plain headdress is absolutely readable as stiff, wrinkled linen. Still, the face and costume of the figure seem to have been simplified. The pale blue light from the window bathes the picture in a beautiful cool radiance. The simple geometric volumes of her head, along with the repeated curves of the bell-shaped collar and skirt, create a quiet, harmonious, almost spiritual, image.

In the Dutch Republic, artists, like other merchants, sold their wares independently, and success was ruled by the marketplace. Many Dutch artists, to be more easily identifiable in the marketplace, specialized in one kind of painting. Vermeer's specialty was interiors. Others specialized in still lifes, animals, or the new, popular subject of landscapes.

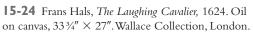
Portraits were Frans Hals's specialty. While he was one of the most prominent of the first generation of artists in the new Dutch Republic, we know



15-23 Jan Vermeer, *Young Woman with a Water Jug, c.* 1655. Oil on canvas, 18" × 16". The Metropolitan Museum of Art (gift of Henry G. Marquand, 1889, Marquand Collection).

very little about him. Most of the surviving documents mentioning his name are records of debts and loans to repay debts. He must have been a very careless manager of money because he had an excellent reputation and many commissions. His *The Laughing Cavalier* (15-24) engages us as few pictures do. It looks much more casual than most posed portraits. It seems as if the dashing man posed only for an instant and was impatient to move again. The energetic brushstrokes in the hair, in the mustache, and in the collar add to the liveliness of the scene.

Hals was painting in Holland at the same time Rubens was working in Flanders. They share a lively, optimistic approach, but Hals's subjects are very far from the aristocrats and goddesses of Rubens. The ordinary, even lower-class characters he portrayed against simple backgrounds identify Hals as a







follower of Caravaggio. In a later portrait, Malle Babbe (15-25), Hals demonstrated an even more spontaneous and looser style. There is more expression in his brushwork, which is filled with feeling and is almost electric. There is also the illusion of great speed, as if Hals could dash off a painting in a few minutes. With a series of rapid spontaneous marks, Hals captures the wild drunkenness of a mad woman, probably an object of ridicule in her town. This style of painting is called **alla prima**. Previously, oil paintings were built up layer by layer over a long period of time with a series of glazes. Instead, Hals's picture is done quickly and at one sitting, alla prima, meaning "at the first." This daring and spontaneous way of painting would have a great influence on the Impressionists of the nineteenth century.

15-25 Frans Hals, *Malle Babbe (Mad Babbe)*, c. 1650. Approximately 30" × 25". Staatliche Museen Preussischer Kulturbesitz, Gemäldegalerie, Berlin.



15-26 Judith Leyster, *The Proposition*, 1631. Oil on canvas, $11\%'' \times 9\%''$. The Mauritshuis, The Hague.

Judith Leyster was a friend of Hals whose pictures were similar in several ways (see the Art News box). But *The Proposition* (15-26) has a seriousness and understanding that is noticeably absent in Hals's work. The bold lighting and the lack of glamour in the scene shows the influence of Caravaggio more profoundly. In the painting, a man is hanging over a seated woman and offering her money in an effort to convince her to become a prostitute. The woman seems modest and embarrassed, uninterested in the

proposition. She is trying to ignore the leering "gentleman," pretending not to hear, as if she were too absorbed in her sewing to notice.

The theme of a proposition is a common one of the period, but Leyster's picture is untraditional. Generally, when men had portrayed this theme, the woman would be dressed provocatively and smiling in a drunken, lusty way. The woman in *The Proposition* is dressed modestly and is clearly uncomfortable. Leyster counters male fantasies with realism.

RT NEWS Judith Leyster Rediscovered

or three hundred years, *The Jolly Toper* (15-27) was thought to be a masterpiece by Frans Hals. This was not an unreasonable assumption, since the painting does resemble his subject matter and style. Yet when the picture was cleaned by a twentieth-century restorer, an important discovery was made—two initials had been painted over. They were not "F.H." but "J.L." While *The Jolly Toper* may look superficially like the work of Hals, it is actually the work of a woman named Judith Leyster. It is not unusual for a woman artist's work to be attributed to a more famous male artist. Sometimes this has been done unintentionally or out of ignorance, or because of wishful thinking, but often it has been done so pictures could sell for a higher price. In this case, the signature may well have been hidden by a dishonest dealer.

Hals and Leyster shared an interest in portraying happy drunkards, so the confusion might have been natural. Because Leyster was listed as a witness at the baptism of one of Hals's children, we can assume they were friends. If we compare her picture to his Laughing Cavalier or Malle Babbe, we notice other similarities. The figures are cut off below the chest, there are plain flat backgrounds, and both works share an immediate, snapshot quality. Leyster, however, does not use loose active brushwork. The texture of the paint is not meant to be noticed. What is important to her is creating a clear, honest portrait.

15-27 Judith Leyster, *The Jolly Toper*, 1629. Oil on canvas, 35" × 33½". Rijksmuseum, Amsterdam.



Rembrandt

While Hals seems to effortlessly capture the personality of the sitter and go no further, Leyster brings depth to her approach. Rembrandt van Rijn also attempted something more profound—to reveal the sitter's soul. The Self-Portrait as a Young Man (15-28) was done in his thirties. Like the Renaissance painter Albrecht Dürer, Rembrandt did many self-portraits during his lifetime. But Rembrandt never represented himself as Christ (14-31). He portrayed people, even himself, with great honesty and no intent to flatter. Rembrandt's devotion to Caravaggio's naturalism, as well as his understanding of chiaroscuro, is apparent in this early self-portrait. These remained his principal means of expression throughout his career.

Rembrandt, the son of a miller, was born in a small Dutch village. At an early age, he was recognized as an artistic genius. A painting done when he was only twenty-four was said to be "a work that could be compared with anything in Italy and with any of the beauties and marvels that have survived



15-28 Rembrandt van Rijn, *Self-Portrait as a Young Man*, 1639. Oil on canvas, $40 \, \%'' \times 31 \, \%''$. National Gallery, London.

from the remotest antiquity." Underlying his talent was his remarkable skill as a draftsman, which can be seen in both his drawings and prints. His *Woman at a Window* (4-10) is a drawing that captures in only a few strokes a personality and a scene. His *Christ with the Sick around Him* (6-9) is an etching of great complexity and imagination, a masterly orchestration of light and shadow. In contrast to the work of most artists (Picasso is one exception), Rembrandt's drawings and prints are held in the same high regard as his paintings.

In the 1640s, the ambitious Rembrandt was Holland's most popular portrait painter and had become quite wealthy. Yet his dream was to be a painter, like Rubens, of impressive historical and biblical scenes. The Sortie of Captain Banning Cocq's Company of the Civic Guard (15-29), known traditionally as the Night Watch, marks a turning point in his career. The large painting (it is more than fourteen feet long) was commissioned by a company of officers under the command of Captain Frans Banning Cocq. The artist knew them and had probably watched them leave for patrol many times, because he lived on the same street as their headquarters. Each of the eighteen men depicted paid one hundred guilders and expected, in return, a traditional portrait. Rather than show everyone equally, however, Rembrandt decided to have a more imaginative composition. Some figures, like the captain, are featured, but others are almost hidden. For example, one soldier, at the right, had the bad luck to have his face blocked by an arm pointing to the center. Some individuals are also concealed by heavy shadows because, rather than using a dull, even light, Rembrandt used dramatic chiaroscuro. The final result was impressive, but, not surprisingly, many of his subjects were unhappy. After the portrait was unveiled, Rembrandt's commissions began to decrease.

The year 1642 marked another sad turning point in his fortunes: His beloved wife and model, Saskia, died after giving birth to their son, Titus. In the *Sortie*, she appears as a small ghostly presence just to the left of center. The loss of Saskia also meant the loss of her trust fund, on which he had become dependent despite his success. Unfortunately, Rembrandt had developed a taste for the finer things in life. He also liked to drink and eat well. As his fortunes declined, he found it impossible to restrain his free-spending ways.

Rembrandt's art came under attack in the 1650s. As the Dutch Republic aged, it became richer and more conservative, less concerned with honesty and



15-29 Rembrandt van Rijn, *Sortie of Captain Banning Cocq's Company of the Civic Guard (Night Watch)*, 1642. Oil on canvas, 12′ 2″ × 14′ 7″. Rijskmuseum, Amsterdam.

realism. Patrons wanted a more classical-looking art, reminiscent of Raphael and ancient Greek statues. This new taste was developing, not only in Holland, but also all over Europe. Like Caravaggio before him, Rembrandt was criticized for his naturalism. It was said his pictures were too dark; they contained too many ugly and vulgar types. Rembrandt refused to change.

Even though he was a Protestant in a Protestant country, Rembrandt thought of himself as the natural heir to Rubens, the great painter of the Catholic Baroque in the North. Therefore, unlike Hals, Leyster, and Vermeer, he painted many religious subjects. Yet

Rembrandt's approach was more spiritual and personal than the grandiose extravaganzas of Rubens. *Jacob Blessing the Sons of Joseph* (15-30) not only illustrates a story from the Old Testament but also is a touching family scene. Encircled by utter darkness, the family of Jacob surrounds the old man in a gentle world of love. Jacob's family is probably not unlike Rembrandt's own, who helped him endure continuing troubles and became his shelter from the storm. He was near financial ruin and harassed by creditors at the time because of his extravagant spending (he owed more than 17,000 guilders—more than most Dutch then could earn in a lifetime).



15-30 Rembrandt van Rijn, *Jacob Blessing the Sons of Joseph*, 1656. Oil on canvas, $5' 8 \frac{1}{2}'' \times 6' 11 \frac{1}{2}''$. Gemäldegalerie, Kassel, Germany.

Rembrandt's biography is told in his many self-portraits. The man seen in the self-portrait of 1660 (15-31) is much changed from the confident young man of twenty years earlier. In the intervening decades, his self-portraits had shown a tattered but defiant, almost confident Rembrandt. By 1659, he had been forced to declare bankruptcy and sell off his personal art collection. Here we see the artist as a tired, worried old man who seems to see little hope in the future. Although he would live another seven years, before his death he would lose both his son Titus and his beloved mistress Hendrickje, and finally become dependent on their daughter, Cornelia.

Rembrandt's dedication to his principles and resistance to Classicism cost him dearly, but his contribution to art was immense. If the Renaissance can be seen as the beginning of the rise in the importance of the individual, then Rembrandt's work can be seen as an important new development of that idea. In his pictures, *his* own unique impressions and

thoughts became even more important than realistic depiction of his subjects. This is the beginning of an important part of the modern approach to art, where the sensibility of the artist is now a crucial element of the subject matter. In other words, not only imitation was to be valued but also expression.

THE BAROQUE IN FRANCE

In Chapter 11, France was discussed as the birthplace of Gothic art, but it would not be an important art center again until the Baroque period. In the seventeenth century, France's power increased rapidly until it became the most powerful nation in Europe and the virtual capital of Western art, a position it would hold for nearly three centuries, until World War II.

Classicism, the same movement that ruined Rembrandt's career, was centered in France. Nicolas



 $\textbf{15-31} \ \ \text{Rembrandt van Rijn, } \textit{Self-Portrait, } 1659. \ \text{Oil on canvas, } 33\,\text{$1/4''$} \times 26''. \ \text{National Gallery of Art, Washington, D.C. (Andrew W. Mellon Collection). } 1937.1.72. \ \ \text{Image @ 2007 Board of Trustees, National Gallery of Art, Washington, DC}$

Poussin was the emperor of Classicism; his ideas and career helped formulate the basic doctrines of the new international movement. He lived for many years in Rome, the mecca of the Classicists. There he made copies of the works of his heroes, the Renaissance masters, along with drawings of ancient Greek and Roman sculptures. His approach to learning would form the basis of the traditional course of study in the French Royal Academy of Painting and Sculpture founded in the seventeenth century. It became the model for academies of art all over Europe, where students were taught the following doctrines of Classicism: (1) reject Naturalism, especially the portrayal of authentic emotions; (2) the highest aim of a work of art is to represent noble and serious thoughts; (3) an artist should make images with logic and order—not as things really are but as they should be; (4) true art should depict great themes and raise viewers up by appealing to their reason, not their base emotions. These doctrines were inscribed in a treatise by Poussin and became

the bylaws of the movement, a major force in Western art for centuries.

Poussin's paintings reflect his belief in an art based on ideals, not naturalism. The shepherds in Et in Arcadia Ego (15-32), for example, are not portrayed as peasants but are closer to the statues of archaic gods. This scene is in fact set in an ideal ancient past, as are all of his works. The light and color are not dramatic but calm, as in the Madonnas of Raphael. The shepherds are reading and reflecting on the words carved into a tomb, "Et in arcadia ego," or "even in Arcadia I am." "Arcadia" was an ancient mythical land, a rustic paradise that symbolizes perfect earthly life. "I" refers to death. The inscription therefore means that even in an ideal pastoral landscape, death rules supreme. The spirit of death is at the right, in the form of a goddess. She calmly puts her hand on one of the shepherds, perhaps announcing the end of his life. All elements of the picture are carefully staged to create a sense of Classical serenity, a dignified world ruled by logic and understanding.



15-32 Nicolas Poussin, Et in Arcadia Ego, c. 1655. Oil on canvas, 34" × 48". Louvre, Paris.



15-33 Hyacinthe Rigaud, *Louis XIV*, 1701. Oil on canvas, 9' 2" × 6' 3". Louvre, Paris.

Louis XIV and Versailles

The dominance of France during the seventeenth and eighteenth centuries was not just artistic but military and political, too. Its preeminence was due to its king, Louis XIV, the most important figure of the Baroque period. After a childhood made insecure by civil war and factional strife, he created a new kind of nation–state based on his absolute rule, sustained by his claim to divine authority. Louis's most famous quote, "L'etat, c'est moi" ("The state, it is myself"), characterizes perfectly his attitude toward governance. Known as the *Sun King*, he was the most powerful monarch in Europe and ruled for seventy–two years.

In his official portrait by Hyacinthe Rigaud (15-33), the sixty-three-year-old Louis is surrounded by sumptuous fabrics and classically inspired architecture. As was characteristic of almost everything associated with Louis XIV, his portrait is gigantic and larger than life, more than nine feet tall. It looms over the viewer and is meant to impress one with its absolute power. The pride with which he reveals his slim legs may seem silly to us today, but simply reflects a change in cultural values—men of this period were as interested in fashion and vain about their personal appearance as women. The large, jeweled sword hilt seen just above his stockings reminds us that he was a man of immense power.

In the mid-1600s, the king grew dissatisfied with his major palace, the Louvre, and decided to make a new one away from the crowds of Paris (whose population had doubled in eighty years), and which reminded him of the political strife of his youth. Hundreds of architects, decorators, sculptors, painters, and landscape designers were sent into the countryside to convert a royal hunting lodge into a palace so grand that it would be capable of glorifying the most powerful ruler in Europe. Because of the astounding size of Louis XIV's Palace of Versailles, no one photograph can capture it, even one taken from the air (15-34). A city was created, attached to its grounds, to house all of the court and government officials, the military, clergy, and thousands of servants. Under Louis, Versailles became a world all to itself, cut off from the distractions of city life. Its famous gardens literally extend for miles (see Chapter 11, pages 206-207).

The palace is a combination of both Classical and Baroque elements. Among the hundreds of rooms inside, the *King's Bedroom* (**15-35**), decorated in gold-and-silver brocade, was the center of activity in the palace. All roads in Versailles led to it, and most of

the important official business was conducted there. The great event of each day was the rising or *levee*, of the Sun. As the sun would appear above the horizon, the Sun King would rise from his bed. Once dressed, he would push open his elaborately carved bedroom door. It opened into the *Hall of Mirrors* (15-36), which would reflect bright sunlight around Louis XIV as he progressed down the hall with his courtiers by his side.

The hall extends the entire width of the central wing's second floor, and the windows provide a fine view of the marvelous gardens. In daytime, the seventeen grand mirrors reflect the light of the large windows across from them, making the hall bright without any artificial lights. Besides mirrors, the walls are covered with marble of many colors, and the ceiling tells of the magnificent accomplishments of the king. As beautiful and elaborate as it is today, compared to Louis's time it is rather bare. It was once filled with gold-and-silver chairs and trees covered with jewels. This and other halls were open to the public to impress visitors with the majesty of Louis XIV. Versailles was the center of many festivals that took place in this hall: comedies, balls, music,



15-34 Aerial view of the Palace of Versailles, France, and the surrounding park, 1669–1685.



15-35 King's Bedroom, Palace of Versailles, France.



15-36 Jules Hardouin-Mansart, Hall of Mirrors, Palace of Versailles, France, 1680.

fireworks, and suppers by torchlight. The mirrors would reflect and magnify the magnificence of the great *fetes* or parties, some lasting for days.

Louis XIV's era was a bloody one in Europe, and he bears a large responsibility for this. He loved war and owed much of his power to it. Attached at one end of the Hall of Mirrors is the *Salon de la Guerre* (War Room, **15-37**), where he made his plans to crush France's neighbors. The central feature of the room is a marble relief that shows him on horseback trampling his enemies in triumph. Around the room are such pictures as "Germany on her knees" and "Denmark surrendering." At the other end of the hall, his queen built a "Salon de Paix" (Peace Room) to balance her husband's ferocity. Sadly, it never seemed to have its intended effect. Still, Ver-

sailles captured the imagination of Europe, and soon there was building everywhere. It was as if every member of the European nobility had to build his own little Versailles.

The Rococo in France: The Aristocracy at Play

Much to the relief of Europe (and France, which was almost bankrupt after more than fifty years of extravagance and wars), Louis XIV finally died in his glorious bedroom in 1715, after ruling for seven decades. When he died, a new period of art began. Its characteristics were not formality and grandeur but lighthearted, playful decoration, as if artists along



15-37 Salon de la Guerre, Palace of Versailles, France, 1683–1685.



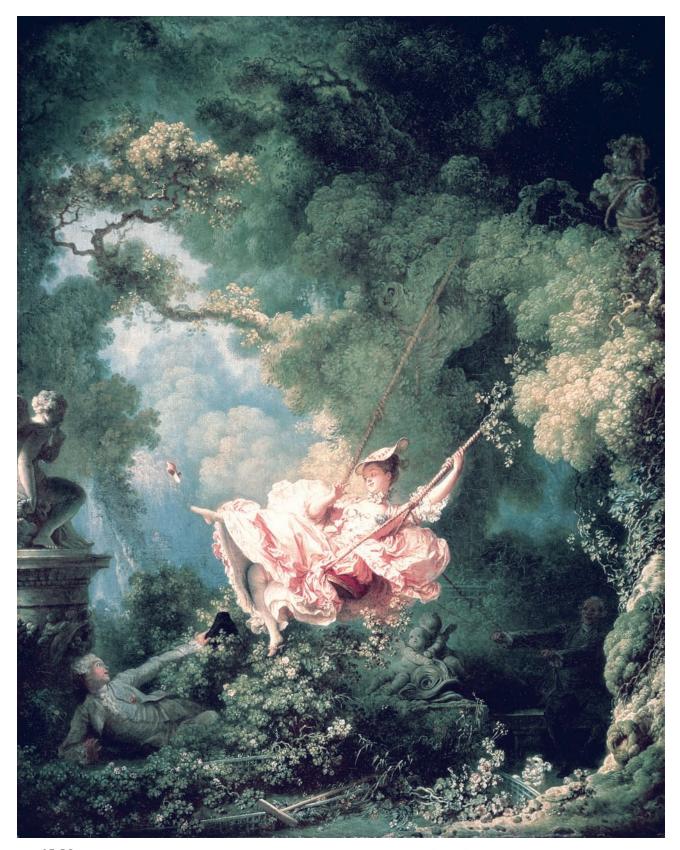
15-38 Antoine Watteau, Return from Cythera, 1717–1719. Oil on canvas, 4' 3" × 6' 4". Louvre, Paris.

with the rest of Europe heaved a deep sigh, relaxed, and began to enjoy themselves.

This new period in art is called the **Rococo**, and Antoine Watteau was its preeminent painter. Born in Flanders (a nation Louis XIV had conquered), he only lived to be thirty-seven, but in his short life he painted many scenes—of parties, picnics, and love that typify the Rococo spirit. His style was influenced by his countryman, Rubens. Notice the similarities between Rubens's Garden of Love and Watteau's masterpiece Return from Cythera (15-38). Curving S shapes and the theme of love reign in both. Each show a variety of actions. The differences, however, illustrate a distinction between the Baroque and the Rococo. Because it is set in the midst of a large landscape, the Return seems much more peaceful than the Garden of Love. The characters are distant, rather than pushed close to the viewer. The lighting is soft and gentle. Watteau's picture is therefore not nearly as intensely energetic as Rubens's. While Rubens

made many paintings on a grand scale, most Rococo pictures are more modest. One of Watteau's largest works, the *Return from Cythera* is a bit more than six feet long; many of Rubens's are twice that.

In Watteau's painting, a group of lovers are about to leave Aphrodite's isle of Cythera, a mythical island where love never dies and one never grows old. We can see that the lovers find it difficult to leave this idyllic island; many look back sadly. Every figure is paired in a couple, some almost swooning in rapture. As in many of Watteau's pictures, a classical sculpture of a bust of Aphrodite, the goddess of love, keeps a watchful eye over lovers, protecting them. Cupid, her son, has left his arrows at its base, because they are unnecessary here. He tugs at one woman's dress, trying to get her attention and tell her that it is time to leave. Swarms of cupids tumbling in the air surround the gondolas at the right, preparing to lead them back to the real world beyond the hazy blue mountains.



15-39 Jean Honoré Fragonard, *The Swing*, 1766. Oil on canvas, approximately $35'' \times 32''$. Wallace Collection, London.

As romantic and lovely as it is, there is a sadness in this and many of Watteau's paintings, as if the wonderful days of youth and love are passing too fast. He may have known he was dying of tuberculosis (what was then called consumption) when he painted this picture. Perhaps he is telling us he does not want to leave just yet. Ten years after his death, the Rococo style had swept Europe; even the clothing worn by his characters in the *Return* had become *the* style for the aristocracy.

The visual idea of love in a garden was especially popular in the France of Louis XV, where the court was dominated by the king's mistresses and intellectual life flourished in the salons of famous female hostesses. French aristocrats of the eighteenth century seemed to be bound by no moral scruples; extramarital affairs and illegitimate children were common. Romantic love was the theme of many works of art, especially those painted to decorate the rooms of wealthy ladies. One of the most famous is The Swing by Jean-Honoré Fragonard (15-39). The mood of this picture is light and playful; love is a game, courtship an art. We see a tastefully dressed young woman swinging above her would-be lover, who is hiding in the bushes. The young man has paid an elderly bishop (seen in the shadows) to bring his beloved to this spot and swing her higher and higher so he can peek up her skirt. The young lady is well aware of her admirer's trick and plays along with it, going so far as to kick off one of her shoes. Even the statues of cupid partake of the intrigue; one holds his fingers to his lips as if to say, "Sssh! It's a secret."

The French aristocracy turned to Fragonard for images to hang in their boudoirs but to Marie Louise Élisabeth Vigée-Lebrun for their portraits. A child prodigy, she supported her widowed mother and brother from the age of fifteen. By the time she was twenty, Vigée-Lebrun commanded the highest portrait prices in France. Her success was enhanced by the patronage of the queen of France, Marie Antoinette, whom she painted more than twenty times. Vigée-Lebrun's *The Artist and Her Daughter* (15-40), painted on the eve of the French Revolution, illustrates how the new Classicism even had begun to

influence the work of a painter devoted to portraying the aristocracy. In the next chapter, we will see how this style was a factor in the coming upheaval.

The successes of Watteau, Vigée-Lebrun, and Fragonard were due in part to the desire of the aristocracy to be cut off from the cares of everyday life and ordinary people. Their pictures, devoted to the elegant lifestyles of upper-class pleasure, simply ignore the existence of any other classes. As the eighteenth century came to an end, however, social and political changes would make it impossible for the aristocracy to ignore the outside world. Because of her close association with the royal family, Vigée-Lebrun was forced to flee during the French Revolution and spent her most productive years visiting the capitals of Europe, a figure of international stature patronized by the crowned heads of Europe. As for Fragonard, he stayed in France. After the Revolution, grace and charm were no longer considered admirable qualities, and his career would sink along with his clients, the nobility.



15-40 Marie Louise Élisabeth Vigée-Lebrun, *The Artist and Her Daughter, c.* 1785. Oil on canvas, 51" × 37". Louvre, Paris.

CHAPTER 16

The Battle of the Isms: Neoclassicism, Romanticism, and Realism

The birth of Modern Art was a slow one, with many parents over the centuries. From the Middle Ages through most of the seventeenth century, artistic styles had evolved slowly over time, one following another. The Romanesque led to the Gothic, Gothic art was replaced by the Renaissance, the Renaissance by Mannerism, Mannerism by the Baroque. The word *modern* was first used to describe art that was wild and imaginative during the Mannerist period. The Renaissance conception of genius and Rembrandt's emphasis on the artist's personal expression also played parts in defining modernity. In the eighteenth and nineteenth centuries, the last elements were introduced. First, the Baroque was replaced by two distinct styles—the Classical and the Rococo. Proponents of these

	PERIOD	HISTORICAL EVENTS	
1650-1776	The Enlightenment Classicism Georgian Age in England Formation of Academies and Societies for Arts and Sciences	Great Fire of London 1666 Milton, Paradise Lost 1667 Locke, Essay Concerning Human Understanding 1690	Diderot, <i>Encyclopedia</i> 1751 Voltaire, <i>Candide</i> 1759
1776-1815	Neoclassicism The Age of Revolutions Industrial and Transportation Revolutions Romanticism in art and literature Napoleonic Age	Jefferson, The Declaration of Independence 1776 The French Revolution 1789–1799 Wollstonecraft, Vindication of the Rights of Woman 1792	Napoleon becomes Emperor 1804 Beethoven, Eroica 1804
1815-1860	South American republics break away from Spain The Victorian period in England The Hudson River School – First school of American painting Realism in art and literature	Scott, <i>Ivanhoe</i> creates taste for historical novels 1819 Invention of photography 1839	Marx and Engels, The Communist Manifesto 1848

movements called themselves the Rubenistes—after the flamboyant painter Peter Paul Rubens—and the Poussinistes—after the classical master Nicholas Poussin. These eighteenth-century styles were then challenged in the nineteenth century, by a series of almost simultaneous movements jockeying for patronage and prestige. All ending in the suffix "ism": the competing movements of Neoclassicism, Romanticism, and Realism each declared that it was the best expression of the spirit of the age.

THE ENLIGHTENMENT

The Age of Reason or the Enlightenment stressed the value of rationality over faith, senses, and emotions. The Enlightenment was an age of great scientists and mathematicians, who attempted to unlock the secrets of the universe using the powers of the human intellect. The foremost thinkers of the time embraced the idea of progress—that the world was getting better and that humans were capable of improving their own lives. These ideas would become core beliefs of modernism.

Beginning in England, this intellectual movement spread to France, which in turn spread its influence throughout Europe by the end of the eighteenth century. An important catalyst was the rebuilding of London after the great fire of 1666, which destroyed more than three-quarters of the old city. Christopher Wren's Saint Paul's Cathedral (16-1) put a new face on the London skyline, one that reflected the best of the Classical, Renaissance, and Baroque traditions. He personally directed the construction of fifty-two new city churches. It was the start of an era that would see for the first time the emergence of an influential native British art.

English Art Becomes Respectable: Reynolds

A career in art in England during the eighteenth century became respectable because of Sir Joshua Reynolds, who became known as an intellectual

ART

Poussin, Et in Arcadia Ego c. 1655



Wren, St. Paul's Cathedral 1675-1710



Watteau, Three Studies of a Youth c. 1710





Gainsborough,

Hogarth,



Jefferson, Monticello 1770-1806



David, Oath of the Horatii 1784



Kauffmann, Cornelia Pointing to Her Children as Her Treasures c. 1785



Canova, Paulina Borghese as Venus Victorious 1804-1808



Ingres, Oedipus and the Sphinx 1808

Nash, The Royal Pavillion at Brighton 1815-1823



Gericault, Raft of the Medusa 1818–1819



Hokusai, The Great Wave c. 1822



Turner, Slave Ship



Millet, The Gleaners





16-1 Christopher Wren, Saint Paul's Cathedral, London, 1675–1710.

figure as well as an artist. Through the interest of wealthy patrons, he was able to study in Italy, an experience that profoundly influenced his views of art and culture. When he returned to London, he immediately became a great success in polite society and the city's most fashionable portrait painter. When the Royal Academy was founded by King George III in 1768, Reynolds became its first president. From this post he was able to dominate "official" art and disseminate his views on aesthetics and the proper training for young painters.

Reynolds taught that all artists should base their work on the Old Masters. He dedicated the Royal Academy to preserving the traditions of the past and believed that an artistic education should begin with technical training, progress to a study of great works of art, and only then attempt to imitate the natural world. Like the French academic and classical artist Poussin, Reynolds believed that great art should concern itself with the ideal rather than the real to express "great and noble ideals." His views were thus directly opposed to those of his countryman and contemporary, William Hogarth (6–7), who believed in useful art that reflected reality.

In his portrayal of the greatest English actress of the period, Mrs. Siddons as the Tragic Muse (16-2), Reynolds painted a symbolic **allegory** (a form of art in which human characters personify certain qualities or ideals). Because Sarah Siddons was famous for her brilliant acting of tragic roles, particularly Lady Macbeth, Reynolds shows her as the classical muse of tragedy. The artist pays homage not just to the actress but also to the Old Masters in his choices of both style and subject. The actress's pose is copied from that of one of the prophets Michelangelo had painted on the Sistine ceiling, while the dramatic lighting and theatrical contrasts are reminiscent of Rembrandt and Gentileschi. Reynolds's color scheme has a typically reddish brown "old masters" tone that contrasts with the fresher and more natural colors of his rival, Thomas Gainsborough.



16-2 Sir Joshua Reynolds. *Mrs. Siddons as the Tragic Muse*, 1784. Oil on canvas, $93'' \times 51 \frac{1}{2}''$. Dulwich Picture Gallery, London.

Thomas Gainsborough

The Blue Boy (16-3) is not only Gainsborough's most famous painting but for many years also probably the best-loved picture in English art. Rather than a mythic figure, the boy in the picture is Jonathan Buttall, the son of a wealthy hardware merchant and a friend of the artist. However, the true subject of The Blue Boy is a love of painting and perhaps even a bit of Gainsborough's friendly rivalry with Reynolds, who had once painted a boy in a similar brown costume. A popular legend states that it was painted just to disprove one of Reynolds's many aesthetic theories—that it would be impossible to make a great painting using blue as the dominant color.

Despite his fancy dress costume, Jonathan Buttall looks boldly at the viewer and appears vigorously alert and alive. The design is simple and striking. The blues of the costume contrast dramatically with the warm reddish-brown tones of the background. Gainsborough's handling of paint varies from the crisp impasto used to detail the suit to the wispy, feathery lines in the trees and sky.

The two most important English painters of the eighteenth century represented different approaches to art. Reynolds, looking to the artistic models of the past and attempting to portray the ideal rather than the real, was a typical Classicist. Gainsborough, however, introduced many of the attitudes of the movement that later became known as **Romanticism**—a deep love for nature and the landscape and an emphasis on his own personal viewpoint rather than adherence to Classical rules. The contrast between these artists is representative of the conflict between two art movements that would dominate the next one hundred years in Western art: Romanticism and Neoclassicism.

NEOCLASSICISM

The **Neoclassical** style was a visual expression of the ideals of the Enlightenment. Enlightenment thinkers, both scientists and philosophers, valued order and rationality above all. Similarly, Neoclassical painters rejected both the high drama and murky atmosphere of Baroque art and the misty sentimentality of the Rococo. They searched for clarity of line, color, and form, admiring the simplicity of Greek art.

The supreme object of the Neoclassical artist was to paint a moral lesson that would educate and improve the viewer—what were called "history



16-3 Thomas Gainsborough, *The Blue Boy,* 1770. Oil on canvas, $70'' \times 48''$. Henry E. Huntington Library and Art Gallery, San Marino, California.

paintings," generally scenes from the ancient past. They dreamed of creating large works of art that could be used to educate the public to civic virtues, much as stained-glass windows educated peasants in the Middle Ages. In the words of Denis Diderot, an eighteenth-century French philosopher and art critic: "To make virtue attractive, vice odious, ridicule forceful: That is the aim of every honest man who takes up the pen, the brush, or the chisel."

An excellent illustration of this moralizing style of art can be seen in the work of an artist of international reputation, Angelica Kauffman. Like Artemisia Gentileschi, she had been trained by her artist father; like Bernini, she was considered a prodigy. As a young woman Kauffman traveled to Florence and Rome, where she met other Neoclassical artists; she eventually settled in Rome. A good friend of Sir Joshua Reynolds, she was one of only two women who became founding members of the British Royal Academy.

Cornelia Pointing to Her Children as Her Treasures (16-4), created in 1785, is a typical Neoclassical painting that both tells a story and points to a moral. Cornelia, a Roman widow, is being visited by a friend who shows off her jewelry. When she asks her hostess to display her own jewels, the proud mother points to her children—two boys on the left and her daughter on the right. Thus the picture demonstrates several values prized by Neoclassicists—modesty, frugality, and pure maternal love. The content and feeling of this painting contrast dramatically with Rococo works about aristocratic sexuality, such as Fragonard's *The Swing* (15-40). Responsibility has replaced frivolity.

The style of the painting reinforces the ideas it expresses. Kauffman's figures are crisp and clean, their outlines set against a plain backdrop. Like other Neoclassical artists, Kauffman prefers clear, bright colors to murky or suggestive shades. Since this is a painted lesson, there is no place for mood, emotion, or atmosphere.

David and the French Revolution

During the eighteenth century, France had lost some of the glory and preeminence she had enjoyed under Louis XIV. Rococo art, patronized by the mistresses of Louis XV, was a style of the bouldoir, not the halls



16-4 Angelica Kauffmann, *Cornelia Pointing to Her Children as Her Treasures*, c. 1785. Oil on canvas, $40'' \times 50''$. Virginia Museum of Fine Arts, Richmond (Adolph D. and Wilkins C. Williams Fund). Acc. #75.22. Photo: Katherine Wetzel.

of government. Toward the end of the century, the frivolous and playful Rococo was criticized as an art of decadence. French Neoclassical art, modeled more directly on Greek and Roman art than on the work of either Poussin or Reynolds, emerged as a powerful force that seemed to express a new, more serious moral purpose. Discoveries at the recent excavations at Pompeii and Herculaneum also served to inspire a Classical revival in art and fashion in the Western world.

Although Neoclassicism appealed to many artists throughout Europe and the United States, it found its most perfect expression in the work of the French artist Jacques-Louis David. David took Neoclassical ideals and followed them to their logical conclusions, concentrating their power. His style of painting appeared absolutely brutal when it first appeared. All the fluidity and elegance of the Rococo, echoes of which had remained in the work of Kauffman, were replaced by a new icy-hard surface. In their crystalline purity, David's figures seem to be carved rather than painted. In his enthusiasm for the new Neoclassical style, he revolutionized academic painting.

Success did not come easily to David. When he was denied the prestigious Prix de Rome (a prize of a year's study in Rome given to the most promising student in the French Academy), he even attempted suicide. Happily (and somewhat surprisingly), the Rococo artist Fragonard took pity on him and transferred an important commission to the young artist. Eventually, David did win the prize to study in Rome, which is where his first great masterpiece, Oath of the Horatii (16-5), was painted.

As in other Neoclassical history paintings, David's painting tells a moral story and seeks to teach proper values. It is based on a legend about the early years of the Roman Republic, when the Romans were about to go to war with the Albans. On the eve of battle, it was decided that the outcome would be determined by single combat in three individual contests. The three brothers of the Horatii family swore to defend the Roman state against three brothers of another family, one of whom was engaged to their sister. David chose to depict the moment when the father calls on his sons to swear to sacrifice their lives, if necessary, for the good of the country. Two brothers would die; so would their sister's fiancé. Thus the virtues David emphasized were patriotism, self-sacrifice, and fidelity to a higher purpose.

The *Oath of the Horatii* shows David's mastery of composition. The geometry of the design is clear: the space is divided by three arches, in front of which are



16-5 Jacques-Louis David, Oath of the Horatii, 1784. Oil on canvas, 11' × 14'. Louvre, Paris.

arranged three distinct figure groupings—the sons, the father, and the women. Silhouetted against the simple, darkened background, three arms reaching toward three swords catch the light. David sets up a powerful rhythm of legs, arms, and swords by repeating each form with slight variations. The outlines of the male figures are rigid and strong, in contrast to the soft, melting outlines of the females.

Although the *Oath of the Horatii* was painted before the French Revolution, its style and content put David at the forefront of art and convinced the revolutionaries that he was one of them in spirit. His utter rejection of the Rococo style was seen as an equally strong condemnation of the old regime. David became not only a firm supporter of the Revolution but also one of its leaders, its artist, spokesman, and historian. He organized revolutionary holidays and celebrations. He abolished the Royal Academy and replaced it with what was called the Commune of Art. David also transformed the Louvre, the newly

vacant royal palace, into a public art museum. As curator, he named his former benefactor Fragonard, who might otherwise have been in danger because of his past association with aristocrats.

Now David painted contemporary events with the same reverence he had used for historical pictures. Like the ancient Roman Republic, the new French state had heroes and martyrs. What was different was that David knew these men and women; they were his associates and friends. For this reason, Death of Marat (16-6) has a great immediate impact. Marat was a revolutionary leader who was forced to spend hours in the bath because of a painful skin disease. Because he spent so much time soaking, Marat was accustomed to working and even receiving visitors while in his therapeutic tub. One visitor was a young woman named Charlotte Corday. A revolutionary who disagreed with Marat's policies, she stabbed him while he was at work. The stark painting combines David's emotional intensity with the



16-6 Jacques-Louis David, *Death of Marat*, 1793. Oil on canvas, approximately 63" × 49". Musées royaux des Beaux-Arts de Belgique, Brussels.

simplicity of the Neoclassical style. Like a religious painting by Caravaggio, nothing in the background distracts from the pale corpse of the martyr Marat. With his white, marble-like flesh, Marat is shown as a mythic hero, not a suffering human.

Before Marat's death, revolutionary leaders had inaugurated a series of public executions known as the Reign of Terror, along with it the long chain of events that would lead to the collapse of the Revolution. David was imprisoned as a traitor, but his life was spared. Then, with the rise of Napoleon Bonaparte, David found a new patron. For him, Napoleon became the hero who would bring France back to glory, and he painted his new hero many times.

But Napoleon was a very different kind of leader from Marat. He was a military man. In a dozen years he had not only fought off France's enemies but also conquered much of Europe. This difference in models is obvious when we compare Bonaparte crossing the Great Saint Bernard Pass (16-7) with Death of Marat and Oath of the Horatii. Rather than exhibiting classical restraint and purity, David fills his canvas with the dynamic form of a rearing horse. Horizontals and verticals, which create a feeling of stasis, have been replaced by strong diagonals, suggesting movement. Cool harmony and balance were now supplanted by theatricality more reminiscent of Baroque artforeshadowing the coming Romantic movement.

Canova and Neoclassical Sculpture

As they ascended the thrones of Europe and married into royal families, Napoleon's relatives also became important patrons of Neoclassical art. The greatest sculptor of the period was Antonio Canova, a Venetian who gained international fame at a young age. Like David, Canova studied in Rome and was directly inspired by Classical art. Napoleon's sister, Paulina, had married an Italian Prince of the Borghese family, a Roman dynasty noted for their fabulous art collection and elegant gardens in the heart of the city. It was natural that Paulina would turn to Canova to immortalize her, as he did when he portrayed her as Venus Victorious (Venus after she had been declared the most beautiful of the Greek goddesses in a mythological contest). With nudity echoing that of the Venus de Milo (Aphrodite of Melos, 12-18), the statue of Paulina lounges on a classical divan (16-8). It may seem shocking that a princess asked to have herself shown as the goddess of love in what appears to be a provocative pose she seems to be either waiting for or relaxing after lovemaking-but Napoleon's sister was known for both her beauty and her scandalous lifestyle. Canova's statue exhibits skill similar to that of Bernini (the Borghese collection still houses both this sculpture and many of Bernini's greatest works), but the effect is far more cool, elegant, and restrained—more Neoclassical. By employing the talents of exceptional artists, the upstart Bonapartes were attempting to catapult their family into the highest society culturally as well as politically.

Soon after working on this statue, Canova was commissioned by Napoleon himself to portray the French leader as Mars, the god of war, although the statue was actually titled *Mars, the Peacemaker.* For this project, the sculptor carved a massive—larger than life-size—naked heroic figure in marble. Unlike his sister, however, Napoleon was embarrassed by a vision of himself as a classical nude. Never publicly

16-7 Jacques Louis-David, *Bonaparte* crossing the Great Saint Bernard Pass, 1801. Oil on canvas, 8' 6" × 7' 3". Chateaux de Malmaison et Bois-Preau, Rueil-Malmaison, France.





16-8 Antonio Canova, *Portrait of Paulina Borghese as Venus Victorious*, 1804–1808. Marble, height 5′ 3″ (1.6 m), width 6′ 7″ (2 m). Galleria Borghese, Rome.

exhibited, the statue was purchased by the British government after Napoleon's defeat at Waterloo and was given to the Duke of Wellington as a reward for his great victory. Today it remains in Wellington's London townhouse as a symbol of fallen pride.

ROMANTICISM

Goya and the Romantic Reaction

The careers of David and Canova contrast sharply with that of the first great Romantic artist we will consider, the Spaniard Francisco Goya. Goya's ambition always was to become a painter to the court. His road to success took many years; he was not elected to the Royal Academy of Spain until the age of thirty-four. He was forty-three when finally elected to the coveted post of president of the Royal Academy and First Painter to the King, the same

position his idol, Velazquez, had held approximately one hundred fifty years earlier. Unfortunately, Spain no longer enjoyed the same power and prestige she had known under Philip IV.

Shortly after reaching his goal of becoming the premier painter in Spain, Goya experienced a personal crisis. For a year he became so ill that he could not paint, and when he recovered he was completely deaf. Yet, as his work became more bitter and critical, he became a far greater artist. Goya's personal problems were echoed by Spain's political disasters. In 1804, Napoleon took advantage of Spain's weak rulers and installed his tyrannical brother on the Spanish throne.

In the war that followed, Goya saw many real events that confirmed his new, morbid view of humanity. One of the most infamous was a massacre of innocent, unarmed Spanish civilians by French soldiers, a scene that the painter immortalized in *The Third of May, 1808* (**16-9**). A faceless firing squad is



16-9 Francisco Goya, The Third of May, 1808, 1814. Oil on canvas, approximately 8' 8" × 11' 3". Museo del Prado, Madrid.

shown in the midst of its butchery; one victim lies in a pool of blood on the ground, while others wait their turn in terror. The central figure is illuminated as if by a harsh spotlight, his arms spread wide in a crucifixion-like pose.

Goya's masterpiece is a mixture of both brutal realism and passionate Romanticism. It appeals not to measured reason but to the viewer's emotions. For David, Napoleon's army was heroic; for Goya, it was made up of inhuman creatures who followed orders blindly. *The Third of May, 1808* is one of the most convincing, powerful, and influential portraits of suffering ever painted. The timeless image reminds us of similar acts of political repression and cruelty in our own time.

Goya's style of painting is as far from David's as were his politics and subject matter. David's technique was flawlessly controlled; the surfaces of his paintings were smooth as glass, revealing no touch of the human hand or brush. Goya's technique was deliberately rough and coarse. Emotion has infused the artist's brushwork—the strokes could be described as wild. This conscious abandonment of control, as well as his fascination with horrifying subject matter, marks Goya's work as Romantic.

Even more gruesome are images from a series of prints known as *The Disasters of War* (16-10). They record what Goya saw as he walked the countryside, and to this day, the images are unbelievable and horrible to contemplate. Before the war, the enlightened thinkers of Spain, Goya among them, had always looked to France for inspiration. France had been the home of a revolution for liberty and justice. But the French did not bring grand ideals to Spain. The butchered remains of Spanish patriots tied to a tree in *Great deeds—against the dead!* serve as a reminder that humanity is just as capable of vicious cruelty as of reason and compassion.

The Birth of Romanticism

It is not surprising that the movement of Neoclassicism gave birth to an opposing artistic style. Neoclassicism had appeared as a reaction to the playful Rococo; the Rococo had developed in contrast to the formal classicism of the Age of Louis XIV. What is surprising is that almost from its conception Neoclassicism was challenged by what might be described as an equal and opposite force—that of Romanticism. Both movements shared certain characteristics, such as a strong sense of moral purpose and a passionate adherence on the part of their



16-10 Francisco Goya. *Great deeds—against the dead!* From *The Disasters of War*, 1863. Etching, 5 ½" × 6 %". British Museum, London.

supporters. But they differed utterly on what values they idealized.

Romanticism rejected much of the logic and order of Neoclassicism. Instead of searching in past models for universal values, Romantic artists looked inside themselves to discover truth. When the German painter Caspar David Friedrich (see 2-21) stated, "The artist should paint not only what he sees before him but also what he sees within him," he expressed one of the seminal ideas of Romanticism. It is an idea that continues to influence the art world up to the present day. When Romantic artists discovered their own tumultuous nature, it also opened their eyes to nature's own power.

Nature, for a Neoclassicist, was an unthinking force that could and should be controlled by humans. The Romantics sensed that nature could never be controlled. Where Neoclassicists set their pictures in classical temples or peaceful landscapes, the Romantics were attracted by the savage, untamed aspect of the natural world. Neoclassicists prized civilization above all; Romantics often chafed under the regulations of society.

The subjects of Friedrich's work could not have been more different from the subjects preferred by Neoclassicists. In place of historical or mythological scenes, Friedrich painted seascapes, forests, and mountains. These wild scenes were often entirely devoid of human figures. At other times, Friedrich showed a solitary traveler silently contemplating the infinity of nature, as in *Wanderer above a Sea of Fog*

(16-11). A feeling of delicious melancholy pervades many of his evocative images, a sense of yearning and the quest for life's meaning.

The English Landscape and Romanticism

England produced great Romantic poets and painters. The works of both groups were centered around nature and the English landscape. J. M. W. Turner's vision of nature was similar to that expressed by Caspar David Friedrich, who gloried in the grandeur and power of the natural world—what was known in the early nineteenth century as the sublime. Turner's brilliant career began early. By the age of seventeen, Turner was able to support himself by painting, and he was elected to the British Royal Academy of Art when he was only twenty-four. Turner's favorite themes were dramatic views of storms, fires, sea battles, and sunrises and sunsets over the sea. In Slave Ship (16-12), Turner exhibits Romanticism of both subject and style. The picture's complete title is Slave Ship (Slave Throwing Overboard the Dead and Dying, Typhoon Coming On). Turner has chosen to show a disaster caused not simply by the destructive power of nature but also by human greed and fear. Here, the slave traders have tossed their human cargo overboard in an attempt to save themselves as the typhoon approaches. The helpless captives sink in the churning waters; on the lower right a chained



16-11 Caspar David Friedrich, *Wanderer über dem Nebelmeer (Wanderer above a Sea of Fog),* 1818. Oil on canvas, 37" × 29". Kunsthalle Hamburg, Germany.

ankle is visible on a single leg surrounded by swarming fish. *Slave Ship* is the ultimate Romantic scene of wild beauty mixed with horror. But at the same time, Turner conveys a strong antislavery message that appealed to English patrons of the period; England was the center of a strong antislavery movement.



16-12 J. M.W.Turner, Slave Ship (Slavers Throwing Overboard the Dead and Dying, Typhoon Coming On), 1840. Oil on canvas, 35¾" × 48¼". Museum of Fine Arts, Boston (Henry Lillie Pierce Fund).

By the end of his career, Turner focused entirely on the raw power of nature and the primal elements of earth, wind, fire, and water. In works like the *Snow Storm* (5-6), he created startling imaginative images, almost totally abstract compositions of color, rich layers of paint, and vigorous brushstrokes that today cannot fail to remind us of the work of the Abstract Expressionists more than a century later.

Romanticism and Politics in France

Théodore Géricault was a young French artist who adopted the Romantic lifestyle. Like the English Romantic Lord Byron, whose poetry he admired, Géricault embraced excess—passionate political convictions, passionate opinions about art, and a passionate taste for adventure. Trained in the academic, Neoclassical style of painting, Géricault traveled to Rome at the age of twenty-five. What caught his attention there were the late works of Michelangelo, especially his *The Last Judgment* (14–27), and the paintings of Caravaggio.

The year Géricault visited Rome, 1816, was also the year of a dramatic historical disaster that caught his imagination and made his reputation. In July, *La* Meduse, a French ship bound for Senegal, was wrecked off the West African coast. The captain and officers boarded the only seaworthy lifeboat and began towing the rest of the one hundred fifty passengers and crew on a raft built from the ship's timbers. After a couple of days, those on the lifeboat cut loose from the raft and abandoned it. By the thirteenth day after the wreck, when the survivors were finally rescued, only fifteen remained alive. The others had died of hunger, thirst, and exposure from the blazing sun as the raft became a living hell where desperate men sickened, became insane, and even ate human flesh.

Géricault threw himself into the immense project of capturing the shocking horror of this event on canvas with enormous energy. In the interest of realism, he had a duplicate raft built in his studio. He interviewed survivors and learned all he could about the disaster. Then he visited hospitals to observe the sick and dying. Yet the final result, the *Raft of the Medusa* (16-13), has a unity that overrides incidental details and transforms the picture into an epic statement of the beauty and danger found in humanity and nature.

Searching for the most dramatic moment in the story, Géricault decided to illustrate the instant



16-13 Théodore Géricault, Raft of the Medusa, 1818–1819. Oil on canvas, approximately 16' × 23'. Louvre, Paris.

when the pitiful remnant of survivors finally caught sight of the ship that would rescue them. The dramatic impact of his canvas is the result of a strong, dynamic composition. The figures are arranged in a pyramid that thrusts from the lower left- and right-hand corners to the figure of a black man waving a flag. Thus the climax of the story is conveyed visually as the viewer's eye is swept swiftly to the peak of the pyramid.

When Géricault died at the age of thirty-four as the result of a fall from a horse, the leadership of the Romantic movement passed to Eugène Delacroix. (Delacroix had not only studied in the same studio as Géricault, but he had posed for the central figure lying face-down in *Raft of the Medusa*.) Like the *Raft of the Medusa*, Delacroix's *Liberty Leading the People* (16-14) is an epic painting based on an important contemporary event. In 1830, Paris rose in a

three-day revolt against a repressive regime that was attempting to reinstate prerevolutionary abuses, such as strict censorship of the press. Though he was not in the streets himself, Delacroix felt a great sympathy for this popular movement.

Like Géricault, Delacroix based his composition on a strong pyramid, but instead of receding into the background, the figures march out of the picture, into our space. This is a visual translation of the idea of progress, of victory. It is almost as if *Raft of the Medusa* had been turned around; a bare-breasted female (the allegorical representation of liberty) replaces the barebacked black man at the center of Géricault's earlier picture. Instead of looking at the action from the outside, we seem to be in the midst of the battle, with smoke swirling around us and bodies under our feet. In both pictures, triumph is juxtaposed directly with suffering and death.



16-14 Eugène Delacroix, Liberty Leading the People, 1830. Oil on canvas, 8' 6" × 10' 8". Louvre, Paris.



16-15 Eugène Delacroix, *The Abduction of Rebecca*, 1846. Oil on canvas, 39 ½" × 32 ¼". The Metropolitan Museum of Art (Wolfe Fund, 1903. Catharine Lorillard Wolfe Collection).

In later years, Delacroix developed a freer style of painting that suited his dramatic subject matter. His *The Abduction of Rebecca* (16-15) is based on a story from Sir Walter Scott's romantic novel *Ivanhoe*, set in medieval England during the reign of Richard the Lionhearted. The beautiful Rebecca loves the hero Ivanhoe but can never be married to him because she is Jewish. Her persecutions make up a large part of the plot; in Delacroix's painting she is shown being thrown over a horse and carried away by the slaves of an evil knight who desires her.

The tempestuous subject and lively composition are well matched. The design is made up of many swirling curves, reminiscent of the work of Rubens, whom Delacroix greatly admired. But Delacroix's colors are more intense, his drawing and brushwork looser. Notice the variation of brushstrokes, the sense of urgency expressed in the flame-like mane of the rearing horse versus the evocative background of a

burning castle billowing smoke and fire. Delacroix liberates color from old restraints. Notice how a color like turquoise will appear in many places—not just the sky but also a turban, the ground, and even the horse's rump. Delacroix's free and brilliant use of color would be an important influence on the Impressionists.

Ingres and Late Neoclassicism

Popular as it was, Romanticism did not replace Neoclassicism. In France, the Neoclassical tradition of David continued in the work of his student Jean Auguste Dominique Ingres, who consciously opposed the Romantic style of his artistic rival Delacroix. The Romantic Delacroix was a colorist; Ingres insisted that beautiful line was more important than dramatic sweeps of color and tone. We have already seen his mastery of line in the lovely portrait of his wife in Chapter 4.

Ingres had been one of David's students and won the Prix de Rome at the age of twenty-one in 1801. He would ultimately remain in Italy for eighteen years, first in Rome, then in Florence. During his early years in Italy, Ingres painted *Oedipus and the Sphinx* (16-16), based on a Greek myth about the tragic hero Oedipus (whose fate was to unknowingly murder his father and marry his own mother). The Sphinx was a monster with the body of a lion, the wings of a bird, and the face of a human woman. If Oedipus had failed to answer her riddle, she would have eaten him. (Notice the skeleton at the bottom left of the painting.) However, according to legend, Oedipus did guess the answer, and the Sphinx committed suicide in her fury at being outwitted.

Like the English Classicist Reynolds, Ingres hoped to make his reputation by mythological and historical paintings such as *Oedipus and the Sphinx*, but he actually gained greater fame from the portrait commissions he accepted to support himself. One of the most beautiful of these is his portrait of Louise, the Countess of Haussonville (16-17), the wife of a diplomat and a brilliant society hostess, as well as a writer and amateur artist.



16-16 Jean Auguste Dominique Ingres, *Oedipus and the Sphinx*, 1808. Oil on canvas, 743/8" × 565/8". Louvre, Paris.

Ingres pictures his subject in her own home, an elegant and fashionable setting. The painting of the still-life objects (such as the vases and flowers) and the costume reveal Ingres's brilliant ability to recreate realistic details of texture and pattern. Despite the collection of precious art objects and rich furnishings, however, the focus of the painting remains on the countess, who stands at its center in a graceful pose. Her expression and the touch of her finger to her chin suggest that she is intelligent and thoughtful as well as beautiful (detail, 16-18). Ingres was not just a master of detail, but also of harmonious composition. The oval of the countess's face is echoed in the oval formed by her shoulder and forearm; all of the lines that describe her figure are gently curved. Everything about her is refined, delicate, and aristocratic—even slightly cool. Compare this portrait to Raphael's Madonna della Sedia (14-24), which Ingres admired above all other pictures. Although Ingres has studied Raphael's line and composition, his view of womanhood is far less sensual—far more typical of nineteenth-century, upper-middle-class morality.

The French Art World Divided

Ironically, the French artists who most admired Ingres's early work were Delacroix and the Romantics. But when Ingres returned to France from his studies in Italy in 1824, he took up the fight against Romanticism with great fervor. The French art world divided into two camps. While Ingres led the new Classicists, who celebrated the Renaissance artists like Raphael, the Romanticists were headed by Delacroix, who revered the Baroque painter, Rubens. Ingres was particularly bitter in his condemnation of the Romantic Rubenistes and all they stood for. He would not even allow his students to look at Rubens's paintings in the Louvre. He called Rubens "that Flemish meat merchant." Ingres felt called on to preserve what he saw as the timeless and true values represented by Neoclassicism. The rivalry between Delacroix and Ingres was fought not only in the Salons but also in the press. Each style had its supporters, patrons, critics, and students.

A cartoon of the time (16-19) shows the artists jousting in front of the Academy, the older Ingres wielding a pen and Delacroix hoisting a brush. While the cartoon mocks both artists, it also grasps one of the major differences between Ingres's Classicism and Delacroix's Romanticism—the distinction between what are called **painterly** and **linear styles** of painting. A linear artist like Ingres (or David, Raphael, or Poussin) draws with sharp out-



16-17 Jean Auguste Dominique Ingres, *Comtesse d'Haussonville*, 1845. Oil on canvas, 4′ 5½″ × 3′ ¼″. Frick Collection, New York.



16-18 Detail of figure 16-17.

lines, clearly defined forms, and relatively solid areas of color. A painterly artist like Delacroix (or Turner or Rembrandt) paints with broader strokes, without distinct outlines between shapes, with gradual gradations of light to dark tones, and with colors blended into each other. The clarity of the linear style clearly has many attractions for the Neoclassical painter, who wishes to portray universal truths and appeal to the intellect of the viewer. The painterly style is more suitable for conveying mystery and mood and thus appealed to many Romantic artists, who hoped to reach their viewers' emotions as well as their minds.



16-19 Caricature of Delacroix and Ingres jousting in front of the Institut de France. Delacroix: "Line is color!" Ingres: "Color is Utopia. Long live line!" Engraving.

GLOBAL VIEW Orientalism

In the vicious battle between Neoclassicism and Romanticism, there was one mutual interest—a fascination with exotic foreign lands. **Orientalism**, or the study of Asian art and culture, swept Europe and the United States throughout the nineteenth century. While Americans were most interested in East Asia (China and Japan), Europeans were more attracted to subjects from the Middle East (today's Egypt, Arabia, Turkey, Iraq, and Iran), or in the case of the British, India. What these Orientalists had in common was a view of the peoples, history, and culture of Asia as "other"—the mysterious opposite of Western civilization. Oriental subjects and designs entered Western art at the same time that Europeans were attempting to dominate Asia both economically and politically.

Orientalism influenced all of the fine arts—painting, sculpture, architecture, photography, and design—as well as European literature, music, and philosophy. In some cases, the borrowing was overt, as in the Royal Pavilion at Brighton (16-20), built for the Prince Regent (the heir to the British throne and acting king after his father, George III, was declared insane). Known for his active social life and flamboyant taste, the Prince had architect John Nash design a seaside palace that echoes many oriental styles—note the multiple domes, minarets, and Islamic arches—particularly the famous Taj Mahal in India, then a recently acquired British colony. Nash's interpretation stands as a tribute to all of these influences, yet although the exterior and interior of the building have been inspired by the "look" of the Orient, they reflect no real understanding of Asian culture or architecture. The mixing of visual elements from very different societies, separate from their original function and meaning, reflects the European habit of appropriating exotic forms rather than respecting them. Collecting design elements, like trophies, from foreign lands and their imagination of the romantic past, nineteenth–century Europeans remixed



16-20 John Nash, The Royal Pavilion at Brighton, 1815–1823.

periods and civilizations to create a fantasy vision. If Jefferson's Monticello (10-41) is the quintessential Neoclassical ideal, based on Greek and Roman models, Nash's palace is a purely Romantic confection. In Monticello, Jefferson lived the life of the mind; in the Royal Pavilion, the Prince Regent entertained on a lavish scale.

The building that inspired The Royal Pavilion was the Taj Mahal of Agra, India (16-21), recently selected as one of the new Seven Wonders of the World. The Taj served a very different purpose than Nash's palace. Rather than a personal residence, it was a royal tomb constructed in memory of Mumtaz Mahal, a beloved wife of

A GLOBAL VIEW



16-21 Taj Mahal, Agra, India. 1623-1647.

the Mughal Emperor Shah Jahan (son of Jahanghir, pictured in 1-21). The famous white marble edifice and its setting took twenty thousand workers seventeen years to complete; one thousand elephants were used on the project. The structure was the result of a collaboration of architects and artists from throughout the Islamic world. No one knows exactly who developed the original concept, but the crownshaped dome was designed by the Turkish architect Ismail Afandi, while inlaid mosaic designs were supervised by Chiranji Lal, an Indian jewelry artist from Delhi. Persian master Amanat Khan, who decorated the walls with calligraphy, was considered so important that he had a status equal to that of an architect.

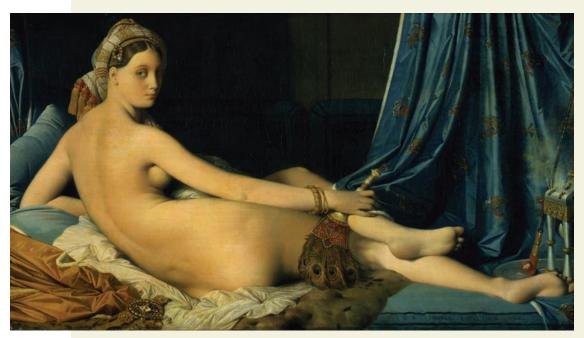
The symmetrical structure is made up of precisely balanced shapes: the central block is surmounted by a dome of equal height, while the width of the block and its wings is exactly equal to the height of the block plus the dome. Minarets stand at each corner, their caps miniature versions of the side domes that flank the gently swelling central dome. The whole arrangement is placed on a high platform, reflected in a pool of water set within a garden. This pool is one of four long, narrow pools that criss-crossed the four symmetrical gardens each divided into four sections on the approach to the tomb (four being a holy number in Islam), and the whole is approached through a massive gate indicating that this is a place set apart from daily life, and symbolizing the gate to Paradise.

Despite its Western association with romance, the edifice's symbolism is religious. The entire complex of buildings, waterways, and gardens (which originally included beautiful beds of flowers) was meant to suggest Paradise as described in the Qur'an. Calligraphic inscriptions on the tomb refer to the Day of Judgment, when unbelievers

A GLOBAL VIEW

will be punished and the faithful rewarded. The building is designed to evoke the Throne of God, beneath which only the most worthy Moslems will rest. The Shah himself decided to be buried with his beloved wife after his death.

Neoclassical artists were entranced with visions of the exotic East, and used Oriental themes in their artwork. For example, Ingres painted several versions of the odalisque, or harem slave—as did his Romantic rival Delacroix. The best-known of these works is the earliest—Ingres' Grand Odalisque of 1814 (16-22), painted for Napoleon's sister Caroline, then Queen of Naples. Here the Neoclassicist Ingres aggressively asserts the primacy of line in the sinuous curves of the central figure, silhouetted against a black background. The reclining nude had been a staple of European painters since Titian's Venus of Urbino (see 14-25), but Ingres' elongated torso seems to owe more to a Mannerist influence than the Renaissance attempt to revive ideal Classical forms. (Critics at the time complained that the odalisque's back was far too long and that her arms lacked bones.) Certainly, Ingres was not influenced by Islamic art, which did not depict the naked body, male or female. Nor had he (obviously) ever visited a Turkish harem, where research suggests that women delighted in elaborate costumes rather than naked lounging. Instead, this is a Western beauty set among symbolic Eastern objects—a hashish pipe, a peacock-feathered fan, and an elaborate turban, borrowed from the collections of other artists to add a touch of exotic realism. Harem slaves or odalisques provided fascinating subjects for European painters throughout the nineteenth century, offering both a critique of the Eastern custom of keeping women enslaved for the sexual pleasure of a ruler, and a titillating glimpse into a forbidden world of erotic pleasure.



16-22 Jean Auguste Dominique Ingres, *Grande Odalisque*, 1814. Oil on canvas, 35% × 63" (91 cm × 1.62 m). Musée du Louvre, Paris.

AMERICAN ROMANTICISM: THE HUDSON RIVER SCHOOL

As Romantic art swept Europe in the nineteenth century, the winds of change reached the new nation of the United States, where the Romantic spirit created the first authentically American school of painting. (The term "school," when used in art, refers not to a real art school but to a group of painters working in a similar style.) Founded by Thomas Cole, this movement was named the Hudson River School after the wide and beautiful river that runs through New York State. The Romantic Hudson River artists saw in America a new, unspoiled land of great promise. They translated their vision into art by depicting many views of the Hudson Valley—an area already experiencing industrialization, although artists chose to show it as unspoiled—and other wilderness areas in the Northeast. The strong horizontal of the horizon line in Cole's View on the Catskill, Early Autumn (16-23), for instance, creates a calm, reflective mood. The winding river seems to meander slowly through a sunny world, fertile with possibilities.

Cole had many admirers and followers but only two pupils. One of these, Frederick Edwin Church, went on to become the most famous and successful American painter of his period. Born to a wealthy Connecticut family, Church surprised his parents by his desire to become an artist. They were eventually won over by his success, a success that allowed him to live a comfortable, even luxurious life and finally to build Olana, a kind of dream castle of his own design on a hillside overlooking the Hudson. In a sense, Church was the greatest example of a Hudson Valley painter; in another sense, he went beyond Cole and the other members of the school. He traveled throughout the world searching for romantic landscapes. Church was even able to transform the symbol of Classicism into a Romantic ruin in his painting of the Parthenon (12-10). Church specialized in views of breathtaking grandeur, magnificent sunsets and sunrises, majestic mountains, waterfalls, volcanoes, and icebergs.



16-23 Thomas Cole, *View on the Catskill, Early Autumn*, 1837. Oil on canvas, 39" × 63". The Metropolitan Museum of Art, New York (gift in memory of Jonathan Sturges by his children, 1895).



16-24 Frederick Edwin Church, *Twilight in the Wilderness*, 1860. Oil on canvas, $40'' \times 64''$. The Cleveland Museum of Art (Mr. and Mrs. William H. Marlatt Fund, 65.233).

In works like Twilight in the Wilderness (16-24), he reveals his continuing interest in the symbolic power of landscape painting to excite human imagination and yearning for the infinite—as in the works of Friedrich and Turner. The dramatic, sweeping clouds that dominate the picture were painted with the new cadmium pigments: brilliant reds, oranges, and yellows then available for the first time. Contrasted against the green of the mountains and reflected in the mirror-like blue lake, these luminous magentas and pinks convey the majesty of the American wilderness through their spectacular visual impact. At the same time, the vast sky with its glowing light seems to translate the idea of America as God's country—a land under special divine protection into visual terms. Yet in 1860, the American wilderness was already disappearing. Viewers who flocked to see Church's work at special exhibitions in New York City (where his paintings were displayed surrounded by curtains, like windows into another world) appreciated not only the grandeur of the American landscape but also the nostalgic sense that such an unspoiled wilderness was already disappearing. The late nineteenth century was, indeed, Twilight in the Wilderness.

REALISM: ART AND POLITICS

In the early nineteenth century, a third –ism arose to challenge the movements of Neoclassicism and Romanticism—a style that became known as Realism. Realist artists focused on the world around them, particularly problems like poverty and political repression. Romantic artists like Goya, Géricault, and Delacroix had tackled such subjects, but Realists went a step further in exposing the gritty details of contemporary life. Led by writers like Flaubert, Balzac, and Zola, French literature moved in the same direction.

French Realist Honoré Daumier began his career as an illustrator but soon became a political cartoonist whose work was published in several satirical journals. In the 1830s, caricatures showing King Louis Philippe as a greedy giant swallowing up the people's earnings and another picturing his face as a fat pear landed the artist in jail for six months.

Although Daumier shared liberal political views with Romantic artists like Delacroix, his work is far more direct and realistic. In *Rue Transnonain* (16-25), like Delacroix, Daumier was recording a battle

between the people in Paris and the government. In this case, workers joined in a weeklong protest against a new law that prohibited unions. One night, a lone sniper in a working-class apartment shot and killed a soldier. The remaining soldiers stormed the residential building and massacred the families they found inside.

In Daumier's lithographic print, it dawns on the viewer only slowly that a terrible tragedy has occurred: an entire family has been murdered. Unlike Delacroix, the Romantic, who chose the tone of an enthusiastic supporter to show a revolt's heroic elements, Daumier, the Realist, honestly depicts the tragic aftermath of unjust violence. Rather than viewing the tragedy as heroic, Daumier stresses the bloody, messy, and also almost ordinary aspect of death.

Despite his challenges to governmental authority, Daumier was not the most controversial of French Realists. The most famous of the French Realists was Gustave Courbet, an artist who was not content simply to caricature society but who actively set out to offend it. As a result of his radical political views,

Courbet began exhibiting pictures that shocked the conservative art world, particularly the Salon (see Chapter 17). On huge canvases, he painted ordinary working and working-class people, as in Burial at Ornans (16-26). Here, on a grandiose scale (the painting is twenty-two feet wide), ordinary people stand clustered around an open grave in a rather desolate countryside. Neither Neoclassical (this is no death of a great figure, and in fact the person being buried is not even named) nor Romantic (there is no adventure among these somber figures), the composition is rather boring and the painting feels almost pointless. Courbet attained the realism he desired by faithfully copying individuals from his native village, dressed in their ordinary clothes, not idealized or beautified in any way. This is similar to his accurate depiction of real people in his The Artist's Studio (1-46). For one of his most controversial paintings, The Stonebreakers (lost or destroyed during World War II), the socialist artist focused on the backs of two laborers breaking rocks for a road. Courbet's critics recognized the antibourgeois and anticapitalist message of this new



16-25 Honoré Daumier, Rue Transnonain, 1834. Lithograph, 11 1/4" × 173/8". British Museum, London, Great Britain.



16-26 Gustave Courbet, *A Burial at Ornans*, 1849–1850. Oil on canvas, 10' 4" \times 21' 11" (3.15 m \times 6.68 m). Musée d'Orsay, Paris.

art and considered his annual entries to the Salon insults to its traditions and values.

The Realist painter Jean François Millet's inspiration came from rural life rather than the town or city. Like Courbet, Millet had grown up among farming people. After a decade of living in Paris, where he received artistic training, he returned to the countryside. From the first, Millet was attracted



16-27 Jean François Millet, *The Gleaners*, 1857. Oil on canvas, $33'' \times 44''$. Musée d'Orsay, Paris.

to the theme of work and workers. In the past, artists had often shown peasants as humorous or picturesque subjects. Millet made them monumental. With bent backs, his workers (male or female) seem to have been shaped from the earth they tend. In *The Gleaners* (16-27), which was displayed at the Salon of 1857 (see Chapter 17), Millet shows three women gathering the "gleanings," or leftover grains, from a field that has already been harvested. These are the poorest of the poor—landless peasants who must toil all day in what was literally backbreaking labor just to collect a few grains.

To translate this reality into pictorial terms, the artist shaped the women almost like lumps of clay and echoed the placement of their figures in the haystacks at the edge of the field. Millet's method of handling paint seemed as rough as his subjects. Instead of creating the smooth, glazed surface favored by popular artists, Millet practically piled his paint on the canvas. Areas of colored pigment became dense and heavy. His colors were most often earth tones or grayed neutrals. According to critics, his pictures were socialistic and ugly; one even said they had the odor of those who did not change their linen. Millet probably did not consider this an insult.

ART NEWS

Rosa Bonheur Wears Pants!

he most famous woman painter of the nineteenth century was Rosa Bonheur, an eccentric individual who often wore male attire and kept a menagerie of animals in her household. Bonheur's training was Neoclassical—her father was an artist who rejected Romanticism, organized an art school, and brought up all of his children—male and female—to be artists. Her interest in nature and studying from real life, however, tied Rosa Bonheur to the Romantics and Realists. Claiming to have had no teacher but her father, however, she went her own way in both life and art.

The household in which the Bonheurs grew up was unconventional. At one point, their father left the family to enter a community of radical utopian socialists who believed in female equality, and whose approved costume for women was a long tunic over a pair of pants. This outfit was similar to what Bonheur wore to work and ride in for the rest of her life. As a child, Rosa (the oldest of four children) was considered a tomboy—educated along with her brothers, she delighted in physical games, and was eventually thrown out of a girls' school where she was sent to be "polished." In her early twenties, Bonheur began studying animal anatomy by visiting slaughterhouses, where she was harassed by men. Dressing as a boy, she discovered, was the best way to remain unnoticed and free to go about her research.

Bonheur's most famous painting, *The Horse Fair* (16-28), was inspired by the horse market in Paris, which reminded the neoclassically trained artist of the horses on the Parthenon frieze. In her multiple studies of animals and figures, Bonheur employed the method Gericault had used for *The Raft of the Medusa*. The final canvas is huge, dramatic, and full of life. The muscular, masculine subject could not be further from the typical work of most female painters of the time, who tended to specialize in flower paintings, still lives, portraits, and family scenes. Bonheur's father had promised her that she would surpass Vigee-LeBrun (15-41), and although that



16-28 Rosa Bonheur, *The Horse Fair*, 1853–1855. The Metropolitan Museum of Art, New York. Gift of Cornelius Vanderbilt, 1887 (87.25).

ART NEWS

claim would be difficult to prove, her work was equally admired by royalty, including Emperor Napoleon III of France and Queen Victoria of England. After traveling through Europe and the United States, *The Horse Fair* was purchased by an American collector, which is why it now hangs in the Metropolitan Museum of Art in New York. Bonheur's dealer arranged for her to sell the copyright to reproductions separately from the painting itself, and her royalties from prints made her a wealthy and independent woman. She was the first woman to receive the Cross of the Legion of Honor. When Empress Eugenie of France awarded it, she declared, "genius has no sex."

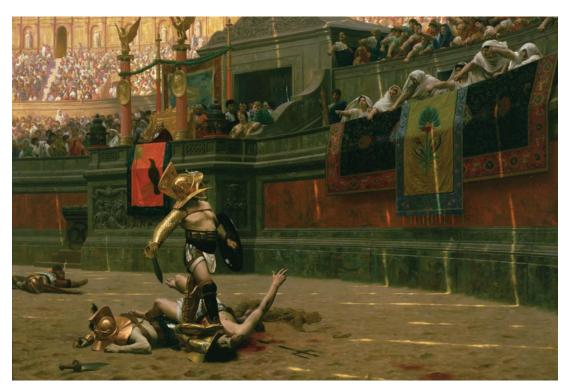


Bonheur wore her hair cut short, smoked cigarettes, and usually wore trousers. In order to wear male dress on her travels, Bonheur even received official permission from the French government—supposedly for "reasons of health." Unlike George Sand, a contemporary French female writer who wore men's clothes as a sign of rebellion, Bonheur always said that her choice of pants and a smock was practical rather than political (16-29). Whereas Sand had a series of lovers, Bonheur spent most of her adult life living with a female friend and her family in a large Château with extensive grounds. There they kept a collection of farmyard and exotic animals, including sheep, cows, horses, and chickens, as well as lions, elk, and a yak—and many others. Rosa Bonheur's lifelong success-artistic and financialproves that despite Victorian conventions, nineteenth-century women were able to express themselves creatively and through an unconventional lifestyle.

16-29 Rosa Bonheur. Coll. Gérard Lévy, Paris, France

NEOCLASSICISM AND ROMANTICISM MERGE IN ACADEMIC ART

In the mid-nineteenth century, a style of painting emerged that integrated aspects of Neoclassicism and Romanticism into a highly acceptable, and popular, formula. This style was approved by the French Royal Academy of Painting and Sculpture, which organized annual exhibits, known as *Salons*, accepting or rejecting submitted works and handing out prizes. The works that won critical praise and patronage (which became known as *academic art*) were extremely detailed and colorful scenes from history, literature, mythology, or exotic lands. Purchasing such works suggested that the patrons—including newly rich and upwardly mobile industrialists from Europe and the United States—were genteel, tasteful, and educated.



16-30 Jean-Léon Gérôme, Pollice Verso (Thumbs Down), 1872. Oil on canvas, Phoenix Art Museum.

One of the most successful of these academic artists was Jean-Léon Gérôme. His *Pollice Verso* (or *Thumbs Down*) (16-30), is a Classical subject with a Romantic twist, where the fate of the defeated Roman gladiator (indicated by the thumbs-down gesture and title) teaches no moral lesson, but provides a voyeuristic thrill for an upper-middle-class audience far removed from the blood sports of the lower classes. Although the painter attempts to imitate the precise linearity of Ingres and the drama of Delacroix, both his drawing and composition lack the genius of those masters.

Rejecting the new approach of Realism, Gérôme and other academic artists continued to produce works in the same style for decades. Gérôme became a well-respected teacher at the French national art school, the Ecole des Beaux-Arts. By the time he died in 1904, European art had moved far beyond the battle between Neoclassicism, Romanticism, and Realism, and stood on the verge of the abstract and nonrepresentational revolution. In resisting Impressionism and Post-Impressionism, the movements that flowed from and supplanted Realism, Gérôme stood with the majority of his class, country, and profession. Not only did his own work remain the same, but in 1893, he argued that France should refuse a gift of Impressionist works. By that time, however,

art history had clearly passed him by. Ironically, once Modern Art took hold, works like those of Gérôme and Bonheur were condemned as "academic" and devalued by museums and collectors. Only in the past few decades have art historians rediscovered and revived an interest in academic painting, and then largely as a reflection of its historical context and social meaning. No experts believe that the work of academic painters, however polished, can compare to the masterpieces of the Neoclassicists, Romanticists, and Realists who preceded them, or with the Impressionists who followed.

Thus, the battle of the –isms produced its own competing movements: an academic school that attempted to merge the best of Neoclassicism and Romanticism, versus an attempt by Realists to make art more modern and reflective of contemporary life. However, influenced by both the flat, abstract line of Neoclassicism and the vibrant colors, loose brushwork, and individualism of Romanticism, a revolutionary generation of artists was about to emerge. These radical individuals broke through artistic conventions that had been in place since the Renaissance. The Impressionists and Post-Impressionists transformed Western art from a cycle of competing styles into a whole new way of understanding—and making—the visual arts.

CHAPTER

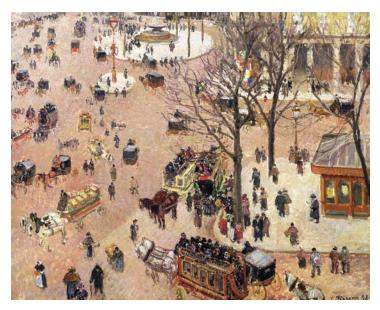
Out of the Studio and into the Light: Impressionism and Postimpressionism

The nineteenth century witnessed the creation of the modern city. Cities like Paris, London, and New York grew into huge metropolises. In the past, the royal court or the church had most often been the center of art patronage. But with the growth of the middle class in towns and cities, a new audience for art began to emerge. Newspapers and magazines commented on art and artists and reported on public opinion about the arts. The relationship between artists and the public changed too, and the modern art market was born. No longer were most paintings done "to order" for wealthy collectors. Instead, artists created artworks in their studios, and then attempted to sell their wares in galleries. Some became incredibly successful and wealthy; most struggled to make a living. But most

	PERIOD	HISTORICAL EVENTS	
1850-1870	The Victorian Period in England Realism in Art and Literature The Salon and Academic Art The Second Empire in France	Japan opens trade with the West 1854 Transatlantic cable completed 1858 Darwin publishes <i>Origins of Species</i> 1859 Serfs freed in Russia 1865 American Civil War 1861–1865 Slaves freed in United States 1865 Suez Canal opened 1869	Meiji Revolution in Japan 1866–1869
1870-1885	Impressionism The Gilded Age in the United States Unification of Italy	Conquest of Western Plains in United States 1865–1880 Italy annexes Rome 1870 Unification of Germany 1871 Dominion of Canada stretches from Atlantic to Pacific 1871 Bell invents telephone 1876	Edison invents the light bulb 1879
1885-1900	Postimpressionism Fin-de-Siecle in Europe	European Imperialism, The Scramble for Africa, 1880–1914 Indian National Congress established 1885 Meiji Constitution in Japan 1889 Spanish American War 1898 Boer War in South Africa 1899–1901 Boxer Rebellion in China 1900	

artists shared one thing: they lived in urban centers, where they could interact with each other and be part of an art world that included gallery owners and critics, as well as artists and collectors. The life of the city had a vital impact on these mid-nineteenthcentury artists.

Nowhere was this more true than in Paris. The capital of France, once deserted by Louis XIV for the artificial city of Versailles, was now again the hub of French government and culture. Rich, middleclass, working-class, and poor rubbed elbows-in the narrow medieval streets, in the formal squares that formerly displayed the power of absolute monarchs, on the wide boulevards recently designed by Baron Haussmann, and in the new public parks. Camille Pissarro's La Place du Théâtre (17-1) is one of many street scenes that convey the bustle of Paris's busy thoroughfares and the daily activities of ordinary people in the modern city. Paris was an exciting place to be.



17-1 Camille Pissarro, La Place du Théâtre, 1895. Oil on canvas, $28\frac{1}{2}'' \times 36\frac{1}{2}''$. Los Angeles County Museum of Art, California.

ART

Courbet, Two Girls on the Banks of the Seine 1857



Church, Twilight in the Wilderness 1860



Manet, Le Dejeurner sur l'herbe 1863



Degas, Orchestra of the Paris Opera 1868-1869



Monet, Impression: Sunrise 1872



Renoir, La Loge 1874



Morisot, Woman at her Toilette 1879



Rodin, The Thinker 1880



Seurat, A Sunday on La Grande Jatte 1884-1886



Cezanne, Boy in a Red Waistcoat 1888-1890



Cassatt, The Letter 1891

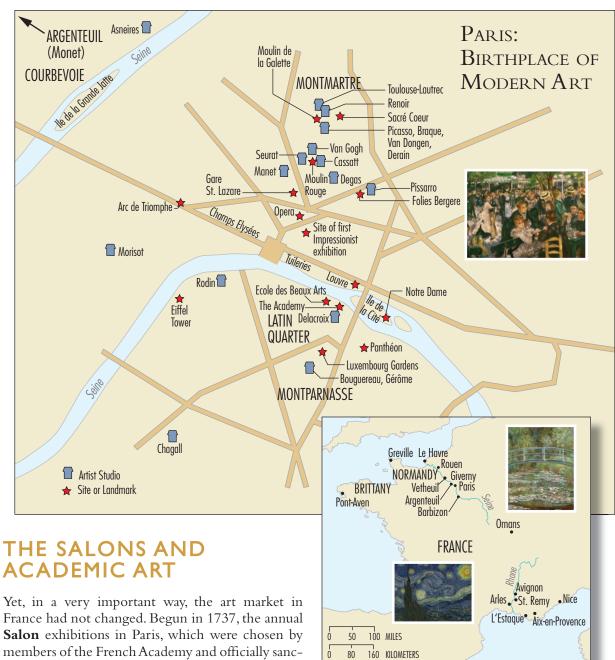




Toulouse-Lautrec, Divan Japonaise



La Farge, Peonies in the Wind 1893



ACADEMIC ART

Yet, in a very important way, the art market in France had not changed. Begun in 1737, the annual Salon exhibitions in Paris, which were chosen by members of the French Academy and officially sanctioned contemporary art, remained the only important public exhibition available to artists. Although generally competently drawn and composed, academic paintings had become largely a repetition of historical, mythological, literary, and exotic subjects, all presented in a similar style. Large canvases on epic historical, literary, and biblical themes, such as Jean-Léon Gérôme's Pollice Verso (Thumbs Down) (16-30) were praised by the Academy as contemporary masterpieces.

But not all artists were satisfied with repeating the formulas of the past. Once again, a new generation rose up to challenge old doctrines and propose

new solutions. What was unusual was not so much the challenge itself; we have seen others before: the Mannerists versus the High Renaissance, or the Neoclassicists versus the Rococo. But the bitterness of the earlier battles was nothing compared to the hostility inspired by the radical art movements of Realism, Impressionism, and Postimpressionism. In part, this happened because, as these styles evolved, they began to challenge the most important premises of Western art. It was in the nineteenth century that

the ideals of Renaissance artists were overthrown and a new world of possibilities opened up for what would be known as Modern Art.

Gustave Courbet was a Realist (see Chapter 16) who was not content simply to caricature society but who actively set out to offend it. As a result of his radical political views, Courbet began exhibiting pictures that shocked the conservative Salon. On huge canvases, he painted ordinary working people—not just working-class people but people actually doing work. Critics recognized the antibourgeois and anticapitalist message of this new art and considered his annual entries to the Salon insults to its traditions and values. For example, in 1857, Courbet presented the Salon with a picture of two young women openly lounging on the banks of the Seine (17-2). The girl in the foreground has taken off her dress and is lying openly in her underwear, a corset, and petticoat. Whether they were prostitutes

or simply young working women, they were clearly not respectable. Courbet had taken a real scene from Paris life—a scene from which proper middle- and upper-class people would have turned their eyes—and glorified it by immortalizing it on a large canvas. Now these same people could no longer pretend "not to see" the seamy side of Parisian life. Visitors coming into the Salon to contemplate uplifting historical and mythological subjects would discover a slice of life they would rather ignore.

A picture such as this appeared graceless and ugly to most mid-nineteenth-century viewers, who either did not understand or did not agree with what Courbet wanted to accomplish. Popular taste called for women to be shown as goddesses and nymphs like *Nymphs and Satyr* by Adolphe William Bouguereau (17-3) or at least pure and unattainable like the *Comtesse d'Haussonville* by Ingres (16-17). As a Realist, Courbet struggled against this kind of idealization.



17-2 Gustave Courbet, Two Girls on the Banks of the Seine, 1856. Oil on canvas, 5' 6 1/2" × 6' 9 1/8". Musée d'Orsay, Paris.



17-3 Adolphe William Bouguereau, *Nymphs and Satyr*, 1873. Oil on canvas, $102\%" \times 70\%"$. © Sterling and Francine Clark Art Institute, Williamstown, Massachusetts. Acquired by Sterling and Francine Clark, 1942. 1955.658

IMPRESSIONISM

The Salon des Refuses and Manet

In 1863, four thousand artists were refused by the official Salon. The rejections became such a scandal that the French emperor, Napoleon III, sponsored an alternative exhibit—known to history as "The Salon des Refuses." For the first time, the state had sponsored a show not approved by academic juries. Artistic freedom of speech was now officially supported. Of all the pictures on display, one in particular excited the liveliest debate and most bitter condemnation. Painted by a young artist named Édouard Manet, it showed a naked woman picnicking with a group of well-dressed, middle-class gentlemen in a park. Both the subject and the way it was painted were criticized at great length in the press. The art public experienced Le Déjeuner sur l'herbe (Luncheon on the grass; 17-4) as a slap in the face. Many art historians have called it the first example of Modern Art.

Manet was a wealthy member of the Parisian *bour-geoisie* (upper middle-class) and had not deliberately



17-4 Édouard Manet, *Le* Déjeuner sur l'herbe, 1863. Oil on canvas, 7' × 8' 10". Musée d'Orsay (Inv. RF 1668), Paris.

set out to be the same kind of radical artist as Courbet. However, as an art student, he had shown little interest in the academic tradition. He said that when he went to class, it was like entering a tomb. Le Déjeuner sur l'herbe was meant by Manet to be seen as a painting in the academic tradition—a nude reclining in a landscape, a theme that had been popular since the Renaissance—but reinterpreted in a modern, realist fashion. However, because Manet clothed his gentlemen in contemporary dress, Parisians found that the scene had many of the same shocking sexual overtones they had objected to in Courbet's Two Girls on the Banks of the Seine. Manet's woman appeared not to be a classical goddess, but simply a prostitute. To show such a naked, shameless creature in the midst of dallying with young men scandalized the bourgeoisie. Some wondered if he were joking.

The way Manet painted was considered just as offensive as his choice of subject. To many viewers, this immense canvas seemed like an unfinished sketch. The nude was particularly criticized for lacking beauty. She had been painted boldly, in high contrast without transitional tones or shades. The stark contrast between her pale body and the dark background also appeared crude and awkward, as if the artist did not know how to do any better. The figure, however, does not reveal incompetence but Manet's fascination with the new media of photography. Early photographs showed Manet that extremely realistic images could be made even if one eliminated most detail and subtle shades.

Manet's style also owed something to past masters. The Baroque master, Velazquez, was a lifelong influence. Velazquez (see detail of *Las Meninas*, 15–17) had created his realism by suggestion, not with precise details but by capturing the way light hit surfaces. Under his influence, Manet began to paint in strong and defining strokes, creating bold and flat shapes. As Manet developed as an artist, the very arrangement of these strokes of paint, their placement on the canvas, was becoming an important part of the painting itself. That is, the *way* in which Manet used paint was becoming as important to him as his subject matter—it actually was becoming the subject of his work. This would become one of the central ideas of Modern Art.

Out of the Studio and into the Light

Manet became a symbol for the young painters of Paris. Although Manet never took part in the exhibits arranged by these radical young artists—who would soon be known as the **Impression**-



17-5 Édouard Manet, *Boating*, 1874. Oil on canvas, 38 ¼" × 51 ¼". The Metropolitan Museum of Art, New York (H. O. Havemeyer Collection, Bequest of Mrs. H. O. Havemeyer, 1929)

ists—he came to be seen as the "father" of the new movement. The younger painters were interested in working outdoors, directly from nature. They were assisted by a new invention of the 1840s—the packaging of oil paints in metal tubes—which made oil paint portable for the first time. Previously, artists had mixed hand-ground pigments with oils in the studio—a painstaking, time-consuming procedure. For this reason, outdoor sketches were done in pencil, chalk, or watercolor and only later transferred to oil on canvas, an indirect method of portraying reality.

This new generation of artists drew from their experiences around Paris. They shared the goal of the Realists to show ordinary contemporary life, but their palette was much brighter. As Manet began to work alongside these younger painters, particularly Claude Monet (see the next section), his colors also became brighter and lighter. Inspired more by Japanese prints (see Global View box) and the life of the city around him and less by past masterpieces, Manet's work began to resemble that of his Impressionist followers. Air, color, and light entered his work.

In 1874, a little more than a decade after he electrified the art world with *Le Dejeuner sur l'herbe*, Manet painted a Parisian couple boating on the Seine (17-5). Here we can see the influence of the younger Impressionists on his style, especially in the choice of lighter, brighter colors, broken brushstrokes (as in the woman's dress and the water), and

the immediate, split-second view. In comparison, Manet's earlier painting seems dark and old-fashioned, with its small figures set in the midst of a traditional landscape. Retaining his strong sense of design and bold handling of paint, by the mid-1870s, Manet expressed himself confidently in the new Impressionist style.

Monet, the Pure Impressionist

To truly understand the essence of the Impressionist movement, one must examine the work of Claude Monet. Monet not only painted the picture that gave Impressionism its name, but he also represents the purest example of the Impressionist method, subject matter, and spirit. In the 1860s, there was a fresh breeze in the air. The word for it was modern. To be modern was to be alive, youthful, and optimistic. The most modern city was Paris, and young artists flocked to it filled with enthusiasm. They painted the outdoor life of the city, its suburbs, and popular resorts. At the floating restaurant and dancing pavilion known as La Grenouillére (17-6), artists, writers, musicians, and dancers-male and female-came from Paris (the trip took less than an hour) to fish, row, swim, eat, drink, dance, and relax.

In his view of the restaurant, Monet achieved heightened color effects by placing colors side by side rather than mixing them. The water in the foreground, for instance, is made up of rough, overlapping, unblended strokes of sky blue, white, and black, with dabs of gold ochre added to suggest the reflection of the floating pavilion on the ripples of the river (17-7).

In 1872, Monet completed a painting that was destined to give an ironic title to the whole new



17-7 Detail of figure 17-6.



17-6 Claude Monet, *La Grenouillère*, 1869. Oil on canvas, 29 3/8" × 39 1/2". The Metropolitan Museum of Art, New York (H. O. Havemeyer Collection, Bequest of Mrs. H. O. Havemeyer, 1929).

movement that he and other painters had begun. Impression: Sunrise (17-8) was a view of the French port of Le Havre with the sun just visible over the horizon. Its vivid colors and lack of detail or outline convey an immediate impression of a place and time of day. This painting was part of the first independent exhibit organized in 1874 by Monet and his friends. They called themselves the Societe Anonyme (or Incorporated Society) of Artists, Painters, Sculptors, Engravers, and so on. The exhibit was not well received. The paintings lacked the "finish" that the public associated with great art, were "too freshly painted," and seemed to resemble sketches rather than completed works of art. "Wallpaper in its embryonic state is more finished than this seascape," wrote one critic of Impression: Sunrise. Noting the title of the work, he titled his review, "Exhibition of the Impressionists"; they became known by that name to their contemporaries and to history.

Monet in Giverny

Several more Impressionist exhibitions occurred, all receiving negative reviews. Most of the artists lived a hand-to-mouth existence. But by 1883, Monet had managed to sell some of his work. He rented a farmhouse in Giverny, a small village on a river outside Paris. Now living in the French countryside, he began to explore new visual themes—rivers, trees, and fields. As the years passed, Giverny became increasingly central to Monet's work. Eventually he purchased the property, which became not only a family home and studio but also the setting for his famous gardens and the subject of much of his later work.

In 1888, he began the first of his famous series of paintings with several views of the muffin-shaped stacks of wheat in a neighbor's field. Repeating the same subject, popularly known as "haystacks," over and over, Monet painted dozens of views in different



17-8 Claude Monet, Impression: Sunrise, 1872. Oil on canvas, 195/2" × 25 1/2". Musée Marmottan-Claude Monet, Paris.

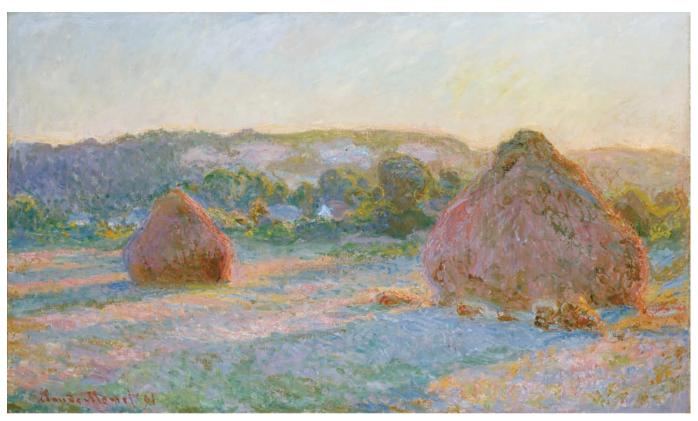
conditions of weather and different times of the day. As he worked, Monet became sensitive to minute and subtle differences in his subject over short periods of time—in as little as twenty minutes or half an hour, he discovered that the light had changed. Thus he set up a series of canvases and worked on each one only as long as the view remained the same. Eventually twenty-five paintings were completed.

In Grainstacks (End of Summer) (17-9), Monet shows the long shadows and golden light of late afternoon. In comparison with his earlier work, the colors are richer and the brushstrokes heavier, laden with thick paint. Monet uses paint to create a purely pictorial texture, a texture which boldly states that we are looking at paint on canvas, not a photograph of reality. Yet, Monet is also attempting to convey something about the natural world—a quality of light and atmosphere—through his color. The setting sun has turned the grainstacks orange and pink, warm against the bluish shadows. The Impressionist use of such vibrant colors reflects nature and the way we see. Lights are not made up of white alone, nor darks of black and gray; in reality, lights and shadows vibrate with color. This had always been part of the

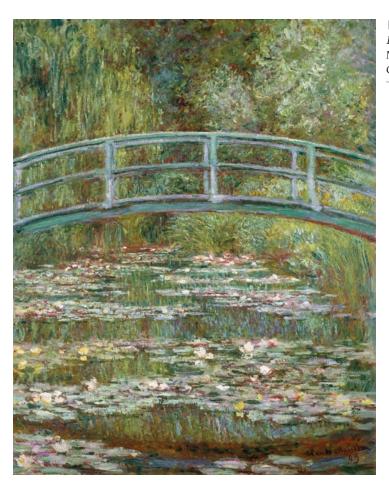
Impressionist technique; now Monet pushed further, exaggerating natural colors for a heightened effect.

With the money he made from his new work, Monet created his own natural paradise at Giverny. He designed and planted a lush garden where water reflected beautiful and exotic flowers. In addition to landscaping the grounds and designing the plantings, Monet added touches such as a Japanese footbridge (17-10). All of this became the subject of his late work.

During the last twenty years of his life, Monet created his most radical work—paintings that appeared dramatically new even when compared to works by the much younger Picasso and Matisse (see Chapter 18). His final project was a series of panels of the water lilies that bloomed in his gardens (17-11). He called them decorations and planned that each would be 6½" feet high by 14 feet long. The resulting paintings remain his most famous and popular works. Although the subject—water lilies in a pool that also reflects the sky and gardens around it—can be recognized, it seems almost incidental to the beauty and power of the densely painted image. Three-dimensional form has finally dissolved into



17-9 Claude Monet, *Grainstacks (End of Summer)*, 1891. Oil on canvas, 23½" × 39". The Art Institute of Chicago (Arthur M. Wood in memory of Pauline Palmer Wood, 1985). Photography © The Art Institute of Chicago.



17-10 Claude Monet, *Bridge over a Pool of Water Lilies*, 1869. Oil on canvas, $36\frac{1}{2}" \times 29"$. The Metropolitan Museum of Art (H. O. Havemeyer Collection, Bequest of Mrs. H. O. Havemeyer, 1929).

pure color, texture, and paint. Vibrant purples and greens float across the canvas; the visual play of color and painted line, the variations of painted texture, the creation of a purely pictorial space built up from individual strokes of color—the Impressionist style had evolved into something dramatically modern, unprecedented in the history of Western art.

Renoir

Another artist whose pictures infuriated the critics, although they seem quite beautiful to modern eyes, was Monet's friend, Pierre-Auguste Renoir. They had met as students, and abandoning their formal training, often painted side by side. They shared bread



17-11 Claude Monet, Nympheas (Water Lilies), 1920–1921. Oil on canvas, 77 15/16" × 234 1/8". The Chrysler Museum, Norfolk, Virginia.

and the insults of critics. In 1876, a well-known journalist wrote that the second Impressionist exhibit was made up of "five or six lunatics" attempting "the negation of all that has made art what it is." Another critic compared the flesh of Renoir's nudes to "a mass of decomposing flesh with those purplish green stains which denote a state of complete putrefaction in a corpse." Yet, more than one hundred years later, Renoir's portraits of women are tremendously admired as representations of female beauty (see *La Loge*, 1–40).

Like all of the Impressionists, Renoir wanted to show the life he saw around him in Paris. But even more than the others, he was concerned with human interactions and moods. While Monet retreated from Paris to the fields and gardens of Giverny, Renoir always remained (in his own words) "a painter of figures." One of his most successful figure compositions, and one that seems to express all of the lighthearted gaiety of Parisian life, was *Le Moulin de la Galette* (17-12). The subject was a popular outdoor café where young middle-class couples could eat, drink, and dance. Renoir used several of his friends

as models for the figures sitting at the tables or whirling around the dance floor.

The dappled light, broken brushstrokes, and bright colors are typical of Renoir's Impressionist style. Pinks are often contrasted with cool blues, yellows set against darks, but the darks themselves are vibrating with strokes of different colors. Somehow Renoir evokes not only the light of a late spring afternoon as it filters through the trees but also the movement of the dancers, the flutter of the breeze, the murmur of the crowd, the music and conversation, the taste of the wine—the pleasures of this particular place and time.

Morisot

If the press was outraged by radical male artists, it found a female working in the bold new style even more appalling. Wrote one critic of Berthe Morisot: "There is also a woman in this group, as there nearly always is in any gang . . . and she makes an interesting spectacle. With her, feminine grace is retained amidst the outpourings of a mind in delir-



17-12 Pierre-Auguste Renoir, Le Moulin de la Galette, 1876. Oil on canvas, 51" × 68". Musée d'Orsay, Paris.



17-13 Berthe Morisot, *Woman at her Toilette*, c. 1879. Oil on canvas, 23¾" × 31½". The Art Institute of Chicago, Illinois.

ium." Morisot had studied with Corot (see Chapter 3-22), but was most strongly influenced by Manet, whose brother she married in 1874. In Woman at her Toilette (17-13), Morisot portrays an intimate interior with an elegant lady arranging her hair in front of a mirror. The viewer seems to stand behind her, peeking over her bare shoulder. The figure is sketched rather than defined, and the face of the subject is hidden. Much of the image is covered with loose, almost abstract brushstrokes that merely suggest a pattern on the wall behind the figure. The rich surface texture does not attempt to imitate flesh, satin, or a silvery mirror, as in Ingres's portrait of the Comtesse d'Haussonville (16-17), but instead offers the creamy impasto of oil paint. As her style developed, Morisot painted more freely and used a lighter palette. The basic ideas behind Impressionism were in harmony with her own: "to set down something as it passes, oh, something, the least of things!"

Degas and Cassatt

If Monet, Renoir, and Morisot were the most typical of the Impressionists, Degas would seem to be the least. Most of his paintings are far from the openair bustle of happy middle-class Parisian life that the public identifies as Impressionism. First, Edgar Degas was not a member of the bourgeoisie but a wealthy, rather snobbish young man from an aristo-

cratic family. Second, while most of the Impressionists consciously rejected academic drawing, Degas truly admired the Neoclassicist Ingres (see Chapter 4). The beauty of Degas's line remained one constant throughout his career.

Like Renoir, Degas recorded the everyday life of the Parisian capital. His outdoor scenes were done not in wheat fields or gardens but at the racetrack. He was particularly fascinated by the pictorial opportunities he found in the world of the theater and ballet—rehearsals, performances, or backstage. Despite his preparation of many preliminary drawings, his pictures do not appear formalized and stiff but like candid snapshots. In fact, he was an avid photographer, and photography added an important element to Degas's masterful and innovative compositions. For instance, in The Orchestra of the Paris Opera (17-15), Degas shows the opera ballet on stage but arbitrarily cuts their heads out of the picture. The cropping gives a quality of immediacy to his observations. Such novel arrangements made the impact of his images seem more alive.

In his late years, pastel became Degas's favorite medium. Where his oil paintings are often darker than those of the rest of the Impressionists, the colors he used in his pastels like *After the Bath* (17-16) were vibrant, applied to the paper unmixed. At the same time, Degas combined these bold colors with his taste for strong design and beautiful lines. Notice

RT NEWS Artist vs. Critic

he relationship between the artist and the art critic has historically been an uneasy one. With the rise of Modern Art, however, the clash between artists and art critics often broke into open warfare. As we have seen, the Impressionists in France were often treated as laughingstocks and the butt of particularly vicious comments. One reviewer wrote of their second exhibition that viewers will "roar in laughter in front of these works." Of Pissarro he wrote, "the things he paints are not to be seen in any country on earth, and no intelligent human being could countenance such aberrations." Most but not all artists suffered these reviews without retaliating. But after reading a review by Edmond Duranty that described his painting as "a philosopher trampling oyster shells," Edouard Manet found the critic in a café and slapped him with a glove. The artist then challenged the critic to a duel with swords. They met a few days later in a nearby forest. After the critic received a minor sword wound, Manet agreed (at the urging of the seconds) that his honor had been satisfied.

One of the most famous battles of this period took place not in France, but in England. It was not held in a field of honor, but in a courtroom. In 1877, the American expatriate artist J. A. M. Whistler (best known today for the painting com-



monly called "Whistler's mother," see box in Chapter 3) was exhibiting a new painting, Nocturne in Black and Gold: The Falling Rocket (17-14). The painting shows a fireworks display in London that Whistler, a prominent supporter of the Impressionists, had painted in the modern style. John Ruskin, one of the most famous critics of his day, described Whistler's picture as "cockney impudence" and "a pot of paint flung in the public's face." Whistler was outraged by the insults and decided to sue the critic for libel.

This was not the first time that Ruskin had criticized Whistler. A few years earlier, he had described another painting as "absolute rubbish, and which had taken about a quarter of an hour to scrawl or daub—it had no pretence to be called painting." Ruskin was an ardent believer in the academic historical painting that filled the Salons of both London and Paris. For him, great art was a time-consuming, painstaking process and had

17-14 James Abbott McNeill Whistler, *Nocturne* in Black and Gold: The Falling Rocket, 1875. The Detroit Institute of the Arts, Michigan.

ART NEWS

"morality." Whistler had studied in Paris and was friends with Courbet, Degas, and Manet. The painter wrote, "Art should be independent of all clap-trap—should stand alone, and appeal to the artistic sense of eye or ear, without confounding this with emotions entirely foreign to it, as devotion, pity, love, patriotism, and the like."

Whistler asked for damages of one thousand pounds (and court costs) for the harm the review had done to his artistic reputation. Because of Ruskin's ill health, the trial did not begin for more than a year. When it began in the Old Bailey, the defense strategy was to criticize Whistler's painting technique. Artists were called as witnesses against Whistler. An old master painting by Titian (see Chapter 14) was brought into the courtroom and compared to Whistler's picture. Whistler was cross–examined and, in a famous exchange, was asked how long the painting had taken him. To the delight of the defense attorney, Whistler calmly said only two days. When then asked if he could justify the high price he put on the painting for only two days' work, he said, "No. I ask it for the knowledge I have gained in the work of a lifetime."

The final result? There was really no winner. After a short but expensive trial, Whistler was declared the victor and awarded damages. Unfortunately, the damages were only one farthing (a coin worth less than a pound) and no court costs. The real result was that the trial bankrupted Whistler. While he proudly wore the farthing on his watch chain, he was soon forced to sell his home and would struggle financially for years.

As a younger man, Ruskin had been a proud defender of artists and had championed the proto-impressionist J. M. W. Turner (see Chapter 16). He also was a leader in calling for the preservation of medieval architecture in Europe, particularly Venice. After the trial, Ruskin's health continued to deteriorate. He became mentally ill and lived increasingly as a recluse and invalid at his home, publishing little, until his death in 1900.

how the composition is based on the complementary curving lines of the woman's shoulders and back contrasted to the U-shape of the towel. He allowed the strokes of the chalk to remain visible, clearly showing the viewer how he constructed his picture from lines of color. The color scheme places gold against turquoise, orange against green. The drawing has been greatly simplified, and the fussiness of detail is lacking. Degas's art draws its power from a fusion of Ingres's line, the solid form and composition of the great Renaissance masters, and the spontaneous realism of Impressionism.

Although Degas often used women, especially working-class women, for his subjects, he said more than once that he detested females. Despite this prejudice, Mary Cassatt won his respect and became a pupil and eventually a close friend. Born of a wealthy



17-15 Edgar Degas, *The Orchestra of the Paris Opera*, 1868-1869. Oil on canvas, $22'' \times 18''$. Louvre, Paris.

family from Pittsburgh, Cassatt had studied art in Philadelphia before coming to Europe and eventually settling in Paris. Although her father supposedly said that he would rather see her dead when she first proposed going abroad to study art, her family (like Degas's) provided enough money to be sure that she would never suffer the privations of most of the other Impressionists.

Also like Degas, Cassatt was more interested in line than the other Impressionists, and her work was also strongly influenced by Japanese prints (see 6-3 and "A Global View," Japonisme). Her favorite subjects were women and children shown in unguarded moments. Most nineteenth-century artists would have sentimentalized this theme of a mother and her sleepy child on a boat ride in The Boating Party (17-17). Instead, Cassatt uses the everyday incident as the basis of a dynamic composition. The strong horizontal seats of the rowboat, the thrusting diagonal of the oar, the broad expanse of the sail contrasted with the flat surface of the water, the opposing curves of the boat's gunnel, and the back of the rower all create an almost abstract composition of flat shapes and lines balanced against each other. The boldness of her shapes and col-



17-16 Edgar Degas, *After the Bath*, 1894. Pastel on paper, 37³/₄" × 30". The Metropolitan Museum of Art, New York



17-17 Mary Cassatt, *The Boating Party*, 1893–1894. Oil on canvas, 35 ½" × 46 ½". National Gallery of Art, Washington, DC.

ors—an acid lime-green against bright blue—are another reminder, as in the works of Monet, Degas, and Renoir, that the Impressionists never stopped developing. For most of these revolutionary artists, the Impressionist period of 1872 to 1886 was followed by an era of searching for new discoveries, new solutions to artistic problems.

Rodin's Touch

The prolific nineteenth-century genius Auguste Rodin combined a love of past forms with an Impressionist sensitivity to artistic materials, along with a Romantic sensibility. In his hands, marble became as sensuous as flesh, and cast-bronze figures like his *Walking Man* (9-15) showed the rough thumbprints of their original clay models. In this sense, much of his work (like that of the Impressionists) appeared unfinished to viewers who expected flawless, almost mechanical smoothness in their statues.

However, Rodin's work was generally well received, and he won important commissions. *The Gates of Hell* (17-18), for instance, were originally designed as



17-19 Auguste Rodin, Detail of *The Gates of Hell, Paola and Francesca*. Musée d'Orsay, Paris.



17-18 Auguste Rodin, *The Gates of Hell*, 1880–1917. Intended to be cast in bronze, fully assembled in plaster, 21' high \times 13' wide \times 3' deep. Musée d'Orsay, Paris.

a doorway to be cast in bronze for a new Museum of Decorative Arts in Paris. With this immense door, Rodin hoped to rival the greatest sculptures of the past, such as Ghiberti's bronze doors for the baptistery in Florence (14-3). Rodin took his inspiration from Dante's poem "Inferno" (the first book of The Divine Comedy). In a sense, the long shadow of Michelangelo (the artist Rodin most admired) also falls over The Gates of Hell. The huge door is a kind of sculptural equivalent of The Last Judgment (14-25). Yet, despite all references to the past, Rodin's interpretation of the subject was completely modern. Out of a pulsating surface are drawn twisted, tortured, isolated figures such as those of Paolo and Francesca (17-19), doomed lovers who must pay for their lust in the second circle of Hell, ever buffeted by the winds. Rodin envisions humanity as both eternally damned

and forever lonely—the bodies that emerge out of darkness are imprisoned in their own pain. Above it all, the famous figure of *The Thinker* (17-20) sits, pondering the scene.

THE POSTIMPRESSIONISTS

Almost all of the artists who came to be known as the **Postimpressionists** began working in the avant-garde style of their time, Impressionism. However, each became dissatisfied with Impressionism and developed a new approach. The most important figures of this new generation of artists were Toulouse-Lautrec, Georges Seurat, Paul Gauguin, Vincent van Gogh, and Paul Cézanne.

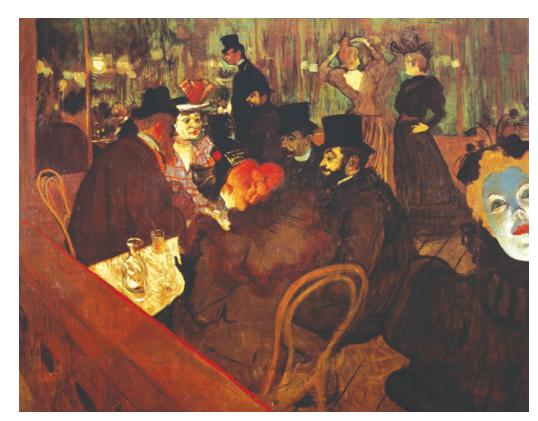
Toulouse-Lautrec

Henri de Toulouse-Lautrec was an aristocrat of distinguished lineage and an adoring admirer of Edgar Degas. However, the older artist refused to associate with him. This was because Toulouse-Lautrec was a peculiar aristocrat who enjoyed the seamier side of French nightlife, the houses of prostitution, and the "cancans" (theatres where a risqué dance took place). He lived in an artificially lit world devoted to



17-20 Auguste Rodin, Detail of *The Gates of Hell*, *The Thinker*, 1880. Musée d'Orsay, Paris.

sordid pleasures. He came to live such a life because he suffered from dwarfism. Seen as deformed by his proper (and callous) father, he was treated as a humiliation to his family. Toulouse-Lautrec left his home as a young man and found acceptance among the prostitutes and cabaret artists of Paris. His childhood talent for drawing lead him to his career.



17-21 Henri de Toulouse-Lautrec, *At the Moulin Rouge*, 1892–1895. Oil on canvas, 4' × 4' 7". The Art Institute of Chicago, Illinois.

A comparison between Renoir's Le Moulin de la Galette (17-12) and Toulouse-Lautrec's At the Moulin Rouge (17-21) can help us understand the striking contrast between the Impressionist point of view and Lautrec's. In Renoir's café, the people are young and happy, celebrating the innocent pleasures of city life. In Toulouse-Lautrec's, the people are tired and ugly; we can almost smell the stale odors of cigarette butts and spilled liquor. One café is outdoors and filled with sunlight and color; the other is indoors and claustrophobic. In the friendly Impressionist painting, a pair of dancers look toward the viewers as if to invite us in. In contrast, the horrifying green-faced woman at the right of At the Moulin Rouge pushes directly toward the viewer, as if to say, "Do you belong here?" It should not be surprising then that Toulouse-Lautrec was never accepted into the Impressionist group and that Degas said that "all his work stinks of syphilis."

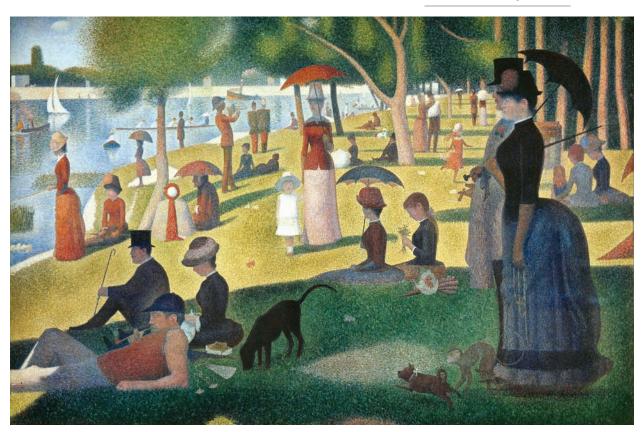
Seurat and Pointillism

A painter of the highest ambition, Georges Seurat wanted to use Impressionism to recreate the timeless, classical feel of Millet and achieve the modern equivalent of Greek art. Seurat worked for two years on his *A Sunday on La Grande Jatte* (17-22). Its size, seven feet by ten feet, puts it on the scale of the grand canvases of David and Gericault, but his subject is entirely different. There is no pomp, suffering, or tragedy. He shows us the pleasures of a warm Sunday afternoon.

The subject, the colors, and the light could have been painted by most of the Impressionists. However, *La Grande Jatte* is unlike a typical Impressionist picture in that it is the result of many drawings and oil sketches. For months, Seurat went daily to



17-23 Detail of figure 17-22.



17-22 Georges Seurat, A Sunday on La Grande Jatte, 1884–1886. Oil on canvas, 6' 9" × 10'. The Art Institute of Chicago, Illinois.

the island of La Grande Jatte to make studies. His concentration was so fierce that he did not respond to friends who tried to get his attention. Seurat was assembling a composition of perfect stillness with figures as solid as statues.

La Grande Jatte is Seurat's most famous picture and justifiably so. Its nearly seventy square feet of canvas is completely covered with tiny dots of color (see detail, 17-23), a method that was the result of years of experimentation. Seurat had noticed that, paradoxically, the smaller his brushstrokes, the more solid the form and the greater the intensity of the colors. His new method of painting, called *Pointillism*, helped him achieve what he had been searching for—more brilliance and light, as well as a sense of permanence.

The final form of the painting was created by a three-stage process. First, Seurat simplified the forms (people, trees, animals) until they were almost silhouettes and their basic geometric shapes could be seen (his drawing, *L'echo*, 2-12, is a good example). Second, he arranged the forms into a satisfying composition, altering them when necessary to help them integrate with one another. Third, he painted the design in a Pointillist manner.

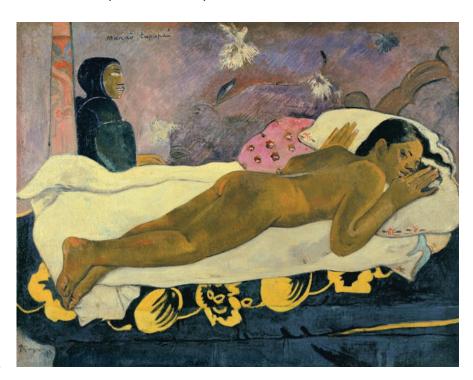
Pointillism was based on new scientific studies of seeing. Artists had always known that mixing colors in paint reduced their colors' intensity. These studies revealed that, by using colors only in their purest state and letting the viewer's eye *optically* mix them, an artist could increase the luminosity of

the colors. This principle of color theory had been understood intuitively by Delacroix and Monet. They all had painted passages in their pictures where pure colors were set side-by-side rather than mixed to form a smooth blend. But Seurat was the first to utilize dots so the colors could optically mix more easily. The dots become virtually invisible when a viewer steps away from *La Grande Jatte*.

But it is not just a scientific method that makes this a great painting; there is also its subject. Seurat shows modern people living in the modern world. Despite the crowds of people and the many activities, there is very little interaction. They are all together yet all apart. This kind of privacy and loneliness is unique to the modern city.

Gauguin and the Search for Paradise

Paul Gauguin's life story brought him fame before his art did. He had been a successful stockbroker and banker who drew and painted for relaxation. He collected the work of the Impressionists and was friendly with them. The Impressionists liked his work well enough to ask him to show with them. As a result, what began as a hobby began to take over his life. In 1883, he suddenly quit his job and decided to make a living as a painter. He abandoned his wife and children for a life of adventure, self-indulgence, and art. His story was what made him a celebrity in his own time.



17-24 Paul Gauguin, *Spirit of the Dead Watching*, 1892. Oil on burlap mounted on canvas, 28 ½" × 363%". Albright Knox Art Gallery, Buffalo, New York.

Gauguin's ideas about art became as radical as his change in lifestyle. He felt that European art needed new life; its old vitality was gone. The Europeans had become too civilized; modern life was corrupted by cynicism. What was missing, he decided, was the energy of primitive art. To recapture the great powers of the universe that had been lost to intellectualism, he decided to become a primitive man himself. In essence, Gauguin was looking to return to the Garden of Eden. If he could find an unspoiled primitive paradise and enter it, it would rejuvenate him. And then he would be able to rejuvenate European painting.

At the world's fair of 1889 in Paris, Gauguin saw beautiful dancers from Java. He became convinced that the paradise he was looking for was in the tropics of the South Seas. In 1891, he went to Tahiti to escape from the decadence of Europe. There he lived among the natives and painted their world. He lived in a shack, took a native girl as a wife, and eventually had a son.

Spirit of the Dead Watching (17-24) shows Gauguin's native wife lying on her bed, terrified of the dark. It is based on a conversation he had with his wife after he had left her alone for a night. The next morning she told him that in the darkness she had seen a dead spirit watching her. To capture the mood, he painted a solid young woman surrounded by an imaginary world. The space is confusing, the colors mysterious. Still, Gauguin could not entirely escape Western culture. The format is in the old tradition of the reclining nude established centuries before by Titian (see his Venus of Urbino, 14-23).

While Gauguin's life made him a celebrity among the general public, his art was what interested other artists. His idea of using primitive art to invigorate European art influenced many artists. So did his use of bright, powerful colors to present an inner, emotional truth. He freed color from the bonds of reproducing visual reality.

Van Gogh: Father of Expressionism

Before he left for Tahiti, Gauguin shared a house for a short period of time with a quiet man, one who would ultimately become much more famous— Vincent van Gogh. As a young man, van Gogh left his native Holland and worked as a preacher among miners. While there, he gave all of his clothes, his money, and even his bed to the impoverished. The authorities were frightened by his zealousness and forbid him to preach anymore. It was not until van Gogh worked in an art gallery owned by his uncle that he found his true mission. Seeing the work of Millet (16-27) there, he suddenly decided to become a painter at the age of twenty-seven. In Millet, van Gogh found a sympathetic soul because he, too, wanted to portray the innate goodness in the hardworking lower class. Van Gogh was not a promising artist at first. He was a poor draftsman; his pictures were crude and clumsy. But he was stubbornly devoted to his mission and worked very hard, religiously, and made slow improvement. His The Potato Eaters (17-25) show people who keep God in their hearts. They have little else. The dark, depressing



17-25 Vincent van Gogh, *The Potato Eaters*, 1885. Oil on canvas, 32 ¼" × 44 ½". Stedelijk Museum, Amsterdam, The Netherlands.

GLOBAL VIEW

Japonisme: Pictures of the Floating World

wentieth-century art owes much to the dissatisfaction and desire for change felt by French artists of the late nineteenth century. Academic art, living on the vestiges of the Renaissance tradition, seemed tired and worn-out to artists like Manet, Degas, and Monet. They and others were looking for a new way of making pictures.

It was at the same time that a fresh source, uncontaminated by Western culture, made its first appearance in Paris—Japanese prints. It was a propitious coincidence. These prints were to be crucial to the creation of Modern Art. To understand them, it is necessary to get a sense of the history and the culture that created them.

Japan in the 1500s was a land of rigid structures and rules. An official class system included (in rank order) the emperor and his family, the military dictators or shoguns, the samurai warriors, scholars, farmers, and tradespeople. In their rigidly structured society, the rich merchants had very little freedom. Because they were unable to buy power or influence, they could only spend their money on luxuries and pleasure. A hidden culture therefore developed, where the powerless could spend their yen. This underworld, located in Edo (now Tokyo), was known as Ukiyo, "the floating world," a place obsessed with rapidly changing fads, pleasure, and little thought for tomorrow. The art made for the floating world was known as **Ukiyo-e** or "pictures of the floating world." This art would later have a powerful impact on European artists and set off a wave of **Japonisme**, or the love of all things Japanese, in Western culture.

A whole section of Edo was filled with brothels and was known as the pleasure quarter. It was the only place in Japan where there were no class barriers. Kitagawa Utamaro's print (17-26) shows men strolling by the display window of a "house of pleasure." The casual, ordinary quality of Utamaro's scene was one of the



17-26 Kitagawa Utamaro, *Scene in Yoshivara*, c. 1803. Woodblock print, ink and color on paper. Mary Evans Picture Library/The Image Works.

A GLOBAL VIEW

most important reasons why Japanese prints were so admired by Europeans. The battle of the Impressionists with the French Academy was not just a matter of new techniques and composition but over what subject matter was appropriate for art. After hundreds of years of the Academy prescribing lofty subject matter, images of everyday life seemed like a breath of fresh air. Degas's interest in documenting the seemingly trivial events of life, like *Woman with a Towel*, then can be traced to the influence of Japonisme. One of the most important types of Ukiyo-e were scenes of life at home.

The composition of Japanese prints also inspired Western artists. Hiroshige's *Maple Leaves at the Tekona Shrine* (3-22) is an excellent example of how elements are cropped and arranged to design the empty space in a structure that ignores perspective. In essence, in Japanese prints everything is arranged for a decorative effect. Edgar Degas's use of cropping and unusual views in pictures like *The Orchestra at the Paris Opera* (17-15) and Mary Cassatt's print *The Letter* (6-10) are more easily understood when one is familiar with Japanese prints.

The most famous and influential of the Japanese print designers on Europeans was a man named Hokusai, whose drawing we saw in Chapter 2. *The Great Wave* (17-27) is the most famous Japanese print in the West. The print is from *Thirty-Six Views of Mount Fuji*, a travel series that portrays Mount Fuji, a religious shrine, from different vantage points and seasons and in all kinds of weather. Hokusai is known for the power of his simple, almost abstract designs. All inessentials are removed. His drawing is strong and clear, with boldly defined outlines and strong, flat colors.

A final reason the Japanese prints remained so popular is because they were so cheap. Even a poor artist like van Gogh was able to amass a fine print collection. In fact, he stated that all his work was "founded on Japanese art," and he went to the south of France under the impression that because of the warm sun there, the people were like the Japanese. He later wrote to Gauguin about his train ride, "I kept watching to see if I had already reached Japan!" While van Gogh tended to overstate his enthusiasms, it is quite clear when one looks at Impressionist and

Postimpressionist art that the striking characteristics of Japanese prints—strong contour lines, flat color shapes, unusual cropping, and decorative patterns—had a major impact on the development of Modern art.

17-27 Katsushika Hokusai, *The Great Wave*, from *Thirty-Six Views of Mount Fuji*, c. 1822. Woodblock print, 10" × 14¾". Musée des Arts Asiatiques-Guimet, Paris.



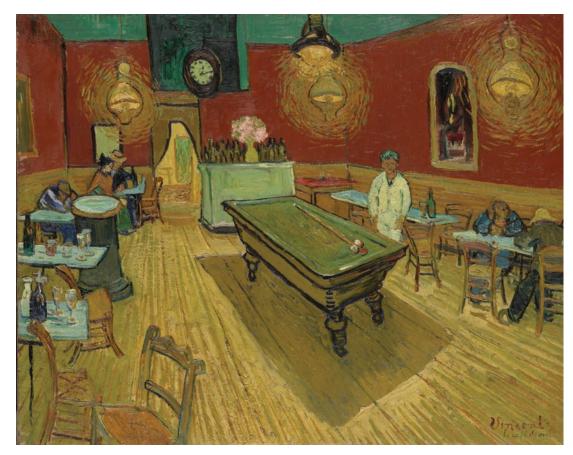
blacks and browns make this a gloomy scene. Yet light falls on their faces, revealing the simple goodness of this family. Despite the obvious clumsiness in van Gogh's early technique, we can already see his ability to transmit strong feelings. This will always be an important strength in his work.

Van Gogh went to Paris to study art, but life there proved difficult. Exposed to all of the most dramatic advances in art, he began to feel the strain. Van Gogh left for the south of France, where he hoped that the warmth of the sun would rejuvenate him. When he got on the train, he did not have a plan for where he would get off. He finally stopped in Arles, which he later called "the country of the sun." There he would have the most productive period of his life. The bright colors of the south would fill his work. He wrote, "I think that after all the future of the new art lies in the south."

In the space of three years, van Gogh went from being a clumsy amateur to a master of line (see 4-8). After ceaseless practice, his drawing had become sure, his lines rhythmic. Some of his advances were due to his study of Japanese art, which he had discovered in Paris (see Global View box). In the house that he rented in Arles, the walls were covered with Japanese

prints. Working feverishly, van Gogh would paint for hours, and then collapse and sleep for days.

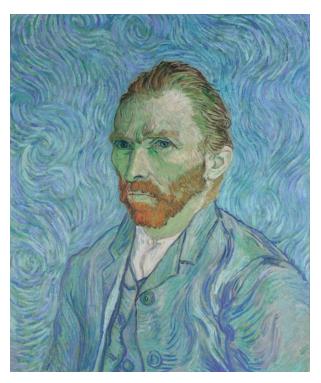
Van Gogh dreamt of a "school of the south" that he would create in Arles. In June 1888, he invited the living artist he most respected, Paul Gauguin, to come live there with him. Gauguin arrived in October, planning to stay a year, but the visit lasted only nine weeks. At first the men worked well together; they would work all day, and in the evening, exhausted, go off to a café. But Gauguin was not an easy man to get along with, and neither was van Gogh. Tension soon developed between them, and they began to argue. A darker world now entered van Gogh's work. He wrote: "In my painting of The Night Café (17-28), I have tried to express the idea that the café is a place where one can ruin oneself, go mad, or commit a crime." Van Gogh stayed up three nights to paint this picture, sleeping only during the day. The contrast with his earlier interior, The Potato Eaters, is considerable. Dark browns and blacks have been replaced by intense colors. The red walls clash against the green ceiling. The floor is a sickly yellow; the lamps cast a dim light that hovers around them like moths.



17-28 Vincent van Gogh, *The Night Café*, 1888. Oil on canvas, approximately 28 ½" × 36". Yale University Art Gallery, New Haven, Connecticut.

One night, after a particularly violent argument, Gauguin stormed out of the house. Later that night, van Gogh—a little drunk, a little mad perhaps—went into a local house of prostitution and handed his favorite girl a box. Attached to it was a note: "Keep this object carefully." Inside was part of his ear. He almost bled to death. He had severed an artery and was discovered in his bed unconscious. He lay in a coma for three days. Van Gogh had gone mad. From then on, he would paint only in his occasional lucid moments. His *Self-Portrait* of 1889 (17-29) is a courageous representation of a man trying to be strong while fighting mental illness. It was painted in the asylum; the world is a confusing mass of blue-green swirls.

In another lucid moment at the asylum, van Gogh painted his greatest picture, *The Starry Night* (17-30). We are on a hill, looking below to a small town whose tallest feature is the steeple of a little church. In the distance are mountains. The stars have come out—with a vengeance. Large swirling balls of fire fill the sky. The ground the town rests on is



17-29 Vincent van Gogh, *Self-Portrait*, 1889. Oil on canvas, $25\frac{1}{2}$ " \times 21 $\frac{1}{2}$ ". Musée d'Orsay, Paris.



17-30 Vincent van Gogh, *The Starry Night*, 1889. Oil on canvas, $29'' \times 36\frac{1}{4}''$. The Museum of Modern Art, New York (acquired through the Lillie P. Bliss Bequest).

unstable; it rolls as if in an earthquake. A large, dark cypress tree rises from the foreground like a brown tongue of fire. All the spiraling shapes are painted by van Gogh with thick lines of paint, sometimes squeezed directly out of a tube (17-31). Starry Night is a vision, a picture of his mental state. Van Gogh was not satisfied with an imitation of the world but wanted an intense recreation of feeling.

Just two months after he had been discharged from an insane asylum, van Gogh completed his last painting, and then shot himself. He was thirty-seven years old. It had been less than five years since he had painted *The Potato Eaters*. His best work was done in little more than two years. Yet his popularity, fame, and influence would be greater than all but a few artists. When van Gogh declared that artists should "paint things not as they are, but as they feel them," he articulated what would become one of the most important doctrines in twentieth-century art.

Cézanne's Revolution

Still, the Postimpressionist who would have the biggest impact on twentieth-century art was Paul Cézanne. Of all the Postimpressionists, Cézanne's work may be the most difficult to appreciate. This is because he redid the way pictures were made—a method developed slowly with years of painstaking work. His subject matter was far from revolutionary; he used three of the most ordinary types of painting: still lifes, portraits, and, the favorite of the Impressionists, landscapes. However, if we examine Still Life with Apples (17-32) closely, what appears at first to be a pleasant still life with some awkward passages proves to be more imaginative. Notice the distortion in the fruit bowl. Its back is tilted forward unnaturally. What you are seeing is not simply a clumsily drawn object. It is a sign that Cézanne is no longer obeying what artists had followed since the beginning of the Renaissance—the mathematical rules of perspective (see Chapter 3).

Cézanne was scrupulously honest. He believed that what the eye saw was the truth, and he realized that perspective was a lie. We do not really see in perspective. None of us is a one-eyed Cyclops, looking in one direction and one direction only. Cameras "see" like that, but people do not. People move their heads and their eyes when they are looking at something.

Perspective, however, had been a very useful lie. It had helped organize paintings and given them the illusion of reality. What could replace it? Cézanne

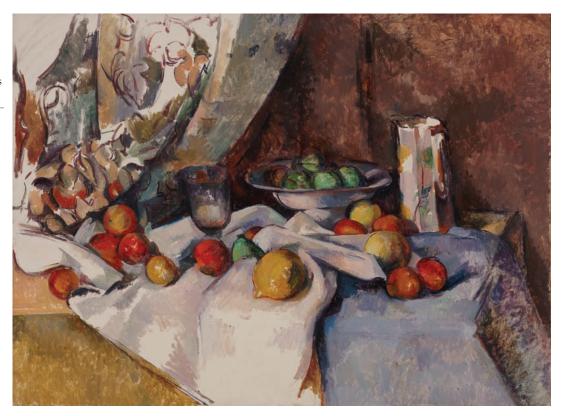


17-3 Detail of figure 17-30.

had the courage to try to find out, to go beyond perspective and try to recreate the way we actually see. This is what gives his pictures their fragmented look. His eyes were looking not at the whole scene but at each part separately. That is how we all see; we look from part to part, never really taking in the scene as a whole. Eventually we accumulate a sense of the scene. In fact, the world we know is a carefully constructed web of relationships—approximations of what is there. For example, look at the white of the tablecloth. It appears thick and three dimensional, but the white areas are actually just empty canvas. The darker marks around the white areas make the tablecloth appear to be solid. Cézanne, through his study of color relationships, noticed that we see objects only when they contrast with what is around them.

It is impossible to look at Cézanne's pictures and not be aware of the painter himself. That is part of Cézanne's honesty—he does not conceal his brushstrokes; he reveals how all of the parts of his picture were made. Cézanne used color, not lines, to create forms. He shared with the Impressionists a distaste for conventional drawing, which they associated with the antiquated French Academy. So Cézanne's shapes are constructed by little planes of solid color lying next to each other. In *Boy in a Red Waistcoat* (17-33), you can see how Cézanne would narrow his focus to study a specific relationship without paying attention to what could be seen elsewhere. Notice how the arm on the right is much longer than the one on the left. Cézanne never thought of the whole

17-32 Paul Cézanne, *Still Life with Apples*, 1895–1898. Oil on canvas, 27" × 36½". The Museum of Modern Art, New York (Lillie P. Bliss Collection).



arm; he examined the relationship of each part of the vest to the adjacent part of sleeve. After he worked his way down and reached the end of the vest, he probably noticed that the boy's arm was unnaturally long. Most artists would at that point make corrections and make sure that the arm was in proportion to the rest of the body. But to Cézanne that would be dishonest. It was more important to record what he had seen than to have a "logical" picture.

Cézanne's pictures mark the end of the naturalistic approach that Giotto began in the 1300s. By rejecting perspective, the cornerstone of art since the Renaissance, Cézanne opened up a Pandora's box in the twentieth century. Artists became free to pursue their own vision and ignore the fundamental rules of academic art. His influence on the painters of the next generation is profound. The work of the two most important painters of the twentieth century, Henri Matisse and Pablo Picasso (see next chapter), would not be possible if Cézanne had not led the way. His relatively small pictures with the most ordinary of subject matter changed the course of art history.



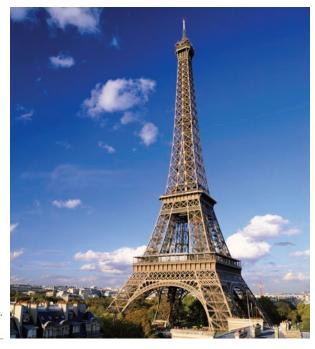
17-33 Paul Cézanne, *Boy in a Red Waistcoat*, 1888–1890. Oil on canvas, $35\,1/4'' \times 28\,1/2''$. Collection of Mr. and Mrs. Paul Mellon, National Gallery of Art, Washington, DC. Image ©2007 Board of Trustees, National Gallery of Art, Washington, DC.

The Real World on Trial: The Early Twentieth Century

	PERIOD	HISTORICAL EVENTS	
1880-1900	Expressionism Art Nouveau Japonisme	First Kodak camera 1888 San Francisco earthquake 1892 Wireless invented by Marconi 1895 Tchaikovsky, Swan Lake 1895 Spanish-American War 1898	Pierre and Marie Curie discover Radium 1898 Freud, The Interpretation of Dreams 1900 Boxer Rebellion in China 1900
1900-1914	Die Brucke (German Expressionism) Fauvism Picasso's Blue Period Analytical Cubism Futurism Photo-Secession	Death of Queen Victoria 1901 Wright Brother's first powered flight 1903 Einstein, Special Theory of Relativity 1905 Henry Ford's Model T 1908 Marinetti's Futurist Manifesto 1909	Sun Yat-Sen founds Chinese Republic 1911 Mona Lisa stolen from Louvre 1911 Stravinsky's <i>Rite of Spring</i> causes riot in Paris 1913 The Armory Show in New York City 1913
1914-1920	Dada The New Objectivity	World War I 1914–1918 Russian Revolution 1917 Balfour Declaration on Palestine 1917 Treaty of Versailles 1919	Black Sox scandal in baseball 1919 Women's suffrage in United States 1920 End of the Mexican Revolution 1920
1920-1940	Synthetic Cubism Surrealism Mexican mural movement	Fall of the Ottoman Empire 1922 T.S. Eliot, <i>The Waste Land</i> 1922 Robert Goddard ignites first liquid fuel rocket 1926 U.S. Stock market crash 1929 Depression in Europe and the United States	Stalin becomes dictator of Soviet Union 1929 Japan invades Manchuria 1931 Rise of Adolph Hitler in Germany 1933 Spanish Civil War 1936–1939 Beginning of World War II 1939

THE BIRTH OF A NEW CENTURY

he end of the nineteenth century ushered in a wave of optimism in Western civilization. A new and better modern world was coming in the new century, an era of progress on all fronts. The emblem of modernism had just been constructed at Western culture's center: the Eiffel Tower in Paris (18-1). It was like a beacon, attracting forward-looking young people, the vanguard or avant-garde of Europe, North America, and even Asia. Remnants of the old way of life were being torn down, not just by artists and writers but also by scientists like Marie Curie and



18-1 Gustave Eiffel, Eiffel Tower, 1887–1889. Cast Iron, 985' high.

ART



Eiffel Tower 1887-1889





Munch,





Steiglitz, The

d'Avignon 1907

Picasso, Les Demoiselles

Matisse, Red Room (Harmony in Red) 1908-1909



Marc Chagall, I and the Village 1911

Steerage 1911



Boccioni, Unique Forms of Continuity in Space 1913



de Chirico, Mystery and Melancholy of a Street 1914

Kirchner, Self-Portrait as a Šoldier 1915



Dali, Persistence of Memory 1931



Duchamp, Fountain 1917







Kollwitz, Bread! 1924

Brancusi, Bird in Space c. 1928



Oppenheim, Object (Le Déjeuner en fourrure) 1936

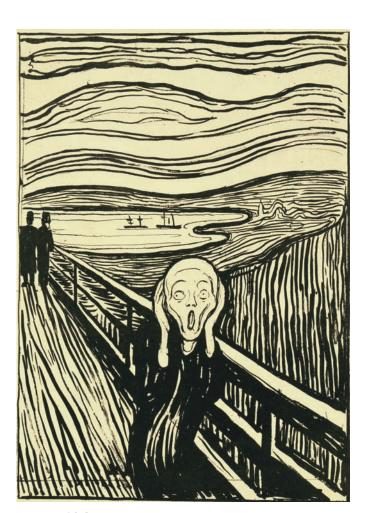


Picasso, Guernica, 1937



Albert Einstein. Sigmund Freud was even changing our view of the human mind.

The tower was built as the main attraction for the International Exhibition of 1889 celebrating the one-hundredth anniversary of the French Revolution. Gustave Eiffel proposed to build the tallest edifice in the world as a "dazzling demonstration of France's industrial power." When it opened, visitors lined up every day, waiting an hour or more to take the long elevator ride to the top. Once there, they were greeted by a godlike view—the panorama of Paris, with electricity, now truly the City of Light. Before the tower was built, only a few balloonists had ever seen such a view. It would not be an overstatement to say that the Eiffel Tower changed the way people perceived reality. Celebrated in paintings, prints, sculptures, and photographs, it articulated the spirit of the times.



18-3 Edvard Munch, *The Cry*, 1895. Lithograph, $20'' \times 15\%''$. © ARS, NY. Museum of Modern Art, New York. Matthew T. Mellon Fund (19.1960).



18-2 Edvard Munch, *Puberty,* 1894–1895. Oil on canvas, 59 %" × 43 ¼". Munch Museum, Oslo, Norway.

MUNCH: "INNER PICTURES OF THE SOUL"

This exciting atmosphere attracted a young man, Edvard Munch, from Norway to Paris in 1889. Dissatisfied with his native land's pleasant, superficial art, Munch was searching for the means to create pictures that explored what lay beneath the strict social conventions of Norwegian society. He wanted Norwegians to abandon their cold formality and puritanical attitudes, to open their eyes and face life. Like van Gogh a decade before him, Munch left Paris skilled in new techniques and dedicated to revealing the underlying emotions of life.

Munch confronted straitlaced Victorian attitudes toward sexuality with works of startling honesty. In his painting *Puberty* (18-2), he explored the mysterious oncoming of sexual impulses in a child. In it, a young girl sits alone, naked, with her arms folded protectively over her thighs. The look on her face is frightened, and she seems completely vulnerable. Her shadow can be seen in two ways: It is a ghostly presence and herself as a long-haired, grown woman.

Munch's most famous image depicts a state of high anxiety. It is usually called *The Scream* or *The Cry* (18-3) in English, but a better translation would be

"the shriek." This woodcut recreates the psychological terror Munch experienced himself one day when walking across a bridge. He wrote about the event:

I walked along the road with two friends. The sun went down—the sky was blood red—and I felt a breath of sadness. I stood still tired unto death—over the blue-black fjord and city lay blood and tongues of fire. My friends continued on—I remained—trembling with fright, and I felt a loud unending scream piercing nature.

The swirling of the curving lines that fill the work do not create a sense of pleasant harmony with nature but quite the opposite. Packed tightly and crowding the central figure, they become ripples of tension. Nature is threatening; life is unbearable. *The Cry* depicts not only a shattering sound wave, but it is also a representation of the inner life. Munch's statement, "Nature is not only that which is visible to the eye—it also includes the inner pictures of the soul," echoes the ideas of the nineteenth-century artists Caspar David Friedrich and van Gogh. Making inner feelings (as dark and deep as they may be) visible would be the aim of many artists in the new century and would be known as **Expressionism**.

GERMAN EXPRESSIONISM

By 1905, followers of van Gogh and Munch in Germany produced paintings that generated an intense emotional effect by their use of powerful colors and vivid contrasts of light and dark. The acknowledged leader of these young artists was Ernst Ludwig Kirchner. With friends he met at architectural school, Kirchner formed the group called *Die Brücke*, or "the Bridge," in 1905. Abandoning architectural studies, the group was dedicated to the renewal of German art by creating paintings and prints that captured the essence of modern life and culture. By expressing emotions honestly and directly, they hoped to encourage others to abandon the stale, hypocritical attitudes of their elders.

Despite their insistence on the "new," Kirchner and other members of *Die Brücke* studied Gothic art and hoped for a rebirth of the medieval guilds. For them, German medieval art was what Japanese prints were for the Impressionists and Postimpressionists—a new inspiration, a non-Renaissance model. Also inspired by Munch's woodcut *The Cry*, Kirchner made woodcuts and experimented with outlining forms forcefully and simply with a few bold lines. By the time he painted *Self-Portrait with Model* in the

early 1900s (18-4), his exploration with prints had led him to a crude approach to drawing. The heavily outlined space is nearly flat. With the addition of vibrant colors, the result is similar in effect to medieval stained-glass windows.

The clashing hues, strong lines, and aggressive spirit make Kirchner's picture a very modern one. The artist is pushed toward the viewer and looks out with an expression that is both confident and casual. The artist's nearly open robe and the half-dressed model behind him imply a recent intimacy, debunking the conventional notion of detached relationships between artists and their models. Because of its style and its statement of modern sexual openness, the picture was a declaration of new attitudes toward art and life.



18-4 Ernst Ludwig Kirchner, *Self-Portrait with Model*, c. 1910. Oil on canvas, 59" × 39 %". © Ingeborg & Dr. Wolfgang Henze-Ketterer, Wichtrach/Bern. Hamburger Kunsthalle, Hamburg, Germany.

Independently, Emil Nolde had also been pursuing the goal of a native German art, pictures that would be "so sharp and genuine that they never could be hung in scented drawing rooms." He acknowledged that the influences of van Gogh and Munch had led him to his method—the use of the direct expressive power of color and form. In a letter paying tribute to his "tempests of color," *Die Brücke* invited the older artist to join them.

In his thirties, Nolde went to study in Paris and saw Impressionist works for the first time. However, the sunlit landscapes of Monet and Renoir did not appeal to him. He was irritated by their "sweetness" and "sugariness," disgusted that Impressionism was "the elected darling of the world." Nolde's preoccupation was not capturing momentary effects of light but "an irresistible desire for a representation of

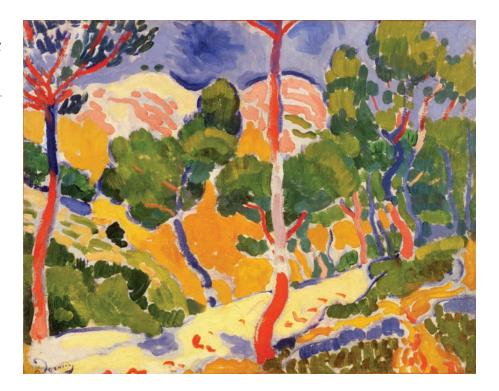
the deepest spirituality, religion, and fervor." Color was the gateway to our inner nature because "every color harbors its own soul."

Nolde's *The Last Supper* (18-5) was the first of a series of religious pictures. It is quite different from da Vinci's version. Rather than a carefully composed Renaissance scene, we witness a tribal rite. Paint was applied in thick, textured layers. The drawing is raw, the colors unmixed and intense. Jesus is performing the eucharist (the sacred transformation of wine and bread into Christ's blood and body) as if he is in a trance. Nolde accentuates the magical nature of the rite, and Christ's followers huddle around him as if they were a loving clan of cave dwellers. Powerful religious emotion fills the painting. Like Caravaggio three centuries before him, Nolde reread New Testament stories, rejected stereotypical images, and



18-5 Emile Nolde, *The Last Supper*, 1909. Oil on canvas, 33 ½" × 42 ½". Statens Museum for Kunst, Copenhagen, Denmark. ⊚ Nolde Stiftung Seebüll

18-6 André Derain, *Landscape*, 1905–1906. Oil on canvas mounted on board, 20" × 25 ½". San Francisco Museum of Modern Art (bequest of Harriet Lane Levy).



presented them in original and powerful ways. Like Paul Gauguin, he wanted to return to a purer, more primal experience of life—to paint like a primitive man. In Nolde's own words, he wanted "to render sensations with the intensity of nature at its most powerful," uncontaminated by logical thought.

FAUVISM

Artists have loved and known the power of color since the time of cave painting; its exploration is far from a twentieth-century phenomenon. But in the early twentieth century, newly invented synthetic pigments enabled artists to use brighter, more intense colors than ever before. Just as the invention of paint tubes was essential for the Impressionists and their work outdoors, the invention of brighter artificial pigments by chemists turned out to be an important catalyst for early twentieth-century artists.

France had a long tradition of innovation in color: from the Romantic painter, Delacroix, to the Impressionists, then Gauguin and van Gogh. In 1900, Henri Matisse and André Derain met while taking art classes in Paris. After studying the adventurous pictures of the Postimpressionists, these young painters began a dialogue that would ultimately have a lasting effect on twentieth-century art. Painting side

by side in the countryside, each goaded the other into more radical experiments with color. Enlisting fellow students and friends on their return, the **Fauves** (or the "wild beasts") were born. Like the German Expressionists, they rejected the need to copy color from the natural world. But for the Fauves, using pure color was not a doorway to exploring dark, primal passions but an exhilarating experience, a source of pleasure. Their ultimate concern was with what takes place on the canvas itself. This is what makes their pictures seem surprisingly fresh and modern even today.

In Landscape (18-6), Derain retained the typical subject matter of the Impressionists, but his approach was quite different. Derain filled the picture with unique color combinations, exploring the potential of colors used uninhibitedly. Rather than using light and dark shading to model forms, as Monet had, Derain eliminated shadows and used colors and rough, thick lines to delineate them. While real, momentary light (as in Monet's Grainstacks) is ignored, nevertheless, Landscape is filled with light because of its brilliant colors. Visual excitement is produced by the intensity of strongly contrasting, even clashing colors: blue against orange, red against green. Because of their almost uniform brightness, each colored area moves forward in Landscape and flattens the space. Fauvist pictures, therefore, were one more modern assault on traditional Renaissance perspective. In such unorthodox pictures, equilibrium was achieved through design, balancing the raw hues by their arrangement in the picture.

MATISSE

French critics were not sympathetic to the Fauves, describing their pictures as "the uncouth and naïve games of a child playing with a box of colors." Yet, the original ideas of Fauvism, manifested in many forms, would occupy the strong-willed Henri Matisse his entire life. He would ultimately become one of the most influential artists of the twentieth century.

Matisse had trained to be a lawyer as a young man. While he was in the hospital recuperating from appendicitis, his mother gave him a box of watercolors. She may have regretted it, because soon afterward he abandoned the legal profession. Matisse wrote of his change of heart:

In everyday life I was usually bored and vexed by the things that people were always telling me I must do. . . . When I started to paint I felt transported into a kind of paradise.

In *Red Room (Harmony in Red)* (18-7), Matisse reinterpreted an interior through the free use of color and design. Using color at its maximum strength, he let the need to balance pattern and colors determine his design. He found that areas of color could balance a composition, just as the Baroque artist Rubens had used dramatic diagonals and limbs pulling in different directions. So the field of red that dominates three-quarters of his canvas holds the picture together. As in a tapestry, the strength of that large color field allows him to place many lively decorative elements within it without creating a chaotic scene.

Matisse had discovered that colors and shapes, once liberated from their obligation to literally recreate objective reality, could imbue paintings with extraordinary energy and life. By escaping the requirements of realistic drawing and using his fertile imagination simply to respond to the natural world, he was able to explore the extraordinary beauty of what he called "a living harmony of colors, a harmony analogous to a musical composition."

During the winters of both 1911 and 1912, at the age of forty-two, Matisse visited the then French colony of Morocco. Drawn by his interest in the decorative patterns of Islamic tiles and rugs, he fell in



18-7 Henri Matisse, *Red Room* (*Harmony in Red*), 1908–1909. Approximately 5' 11" × 8' 1". State Hermitage Museum, St. Petersburg, Russia.

18-8 Henri Matisse, *The Moroccans*, Issy-les-Moulineaux, November 1915 and summer 1916. Oil on canvas, 71 %" × 9' 2". The Museum of Modern Art, New York (Gift of Mr. and Mrs. Samuel A. Marx. 386.1955).



love with the sense of peace there and North Africa's bright, steady light and exquisite colors. His fascination with Islamic architecture and design resulted several years later in *The Moroccans* (18-8). This painting evokes a series of experiences like a multiple-exposure photograph. Structurally, Matisse took even more liberties than before with conventional drawing, scale, and perspective. At the left, we can see a floating balcony, and behind it, a mosquelike building. At far right is a large, cross-legged Arab with his back to us. Notice how the shapes can suggest more than one meaning. For example, the green shapes at bottom left can be read as either the leaves of plants or the bodies of Muslims at prayer. The orange circles are either fruit or turbans.

In *The Moroccans* there is no struggle, no shock, no tension. Soft pastels of pink and lavender create a pensive mood very far from the anxieties of Munch's Expressionist masterpiece *The Cry*. The picture, although very large, is not designed to intimidate the viewer like so much of modern art. Open and friendly, it is the twentieth-century version of **grazia** (see Chapter 14). The simplicity—the free and easy feeling—in Matisse's pictures was actually hard won; he labored on version after version of each subject on a canvas. Day after day, unsatisfactory work was scraped and wiped off so a new attempt could be made. The process might take months, but Matisse wanted to ensure that each picture would

look like it was done at one sitting with the greatest ease. Matisse said that he struggled to reach "an art of balance, of purity and serenity . . . something that calms the mind."

PICASSO AND CUBISM

Pablo Picasso is, without question, the most famous and celebrated artist of the twentieth century. A child prodigy, Picasso told a story about how he surpassed his father, a respected art instructor at the School of Fine Arts in Barcelona, before he was ten years old. According to this legend, the young Picasso was already working as an assistant to his father when he was asked to paint a small bird on a large canvas his father was working on. When his father saw what his son had done, he was stunned. He gave Picasso his brushes and said, "You take them; you already are better than me." Whether the story is actually true or not, it reflects the absolute confidence and talent Picasso already had as a young man. By 1900, at the age of nineteen, having mastered academic technique, he went to Paris in search of greater challenges. Always a quick study, Picasso assimilated the most advanced early styles of Modern Art in just a couple of years. His early work from Paris includes pictures in the manner of Toulouse-Lautrec, Seurat, and Gauguin.

n the early twentieth century, Picasso and other modern artists were inspired by African art that was being exhibited in museums and privately collected in Europe for the first time. Picasso said:

I have felt my strongest artistic emotions, when suddenly confronted with the sublime beauty of sculptures executed by the anonymous artists of Africa. These works of a religious passionate and rigorously logical art are the most powerful and most beautiful things the human imagination has ever produced.

For European artists, African art was thrilling because it provided a new direction that could revitalize Western art through more "primitive" geometric forms. Yet, unfortunately, it was the understanding of the Europeans that was primitive. The African art was the product of sometimes thousands of years of tradition. But Picasso, like others, showed little if any interest in learning about the cultures that produced this exciting art. Their limited interest mirrored their worldview during an age of colonialism. For them, Africa was meant to serve the needs of Europe, whether that meant raw materials for industry or artists.

What Picasso and the others were missing was the vibrant living tradition of Africa. One of the great African artists alive at the time was Olowe of Ise. Far from an anonymous tribesman, Olowe was a Yoruban known throughout his nation. The Yoruba have a thousand-year-old culture and remain one of the largest groups in Africa. There are today about eighteen million Yoruba who live primarily in Nigeria, but they can be found from Senegal to Egypt.

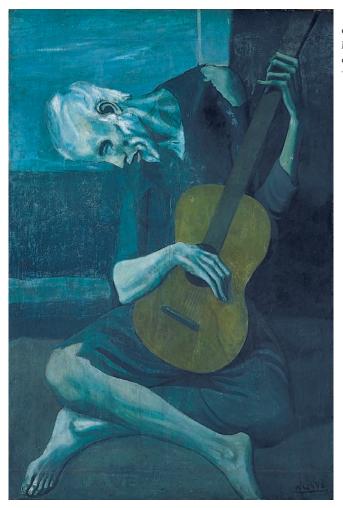
Olowe was first a sculptor to the King of Ise, but during his career he was summoned for work by the rulers of Ilese, Akure, Idanre, and Ogbaki. His *Veranda Post of Enthroned King and Senior Wife* (18-11) was a commission for the *Ogoga* or King of Ikere. The post was one of four for the palace of the Ogoga and was originally painted in bright red, white, and indigo. It depicts the king, his senior wife, a junior wife, and the god Esu. As is traditional in African art, it utilizes hierarchical scaling—the size of the figures conveys the status of the individuals (see Chapter 3). What is surprising to Western eyes is the relative size of the senior wife compared to the king. While the king is certainly the central figure, his wife towers over him. The role of the senior wife was very important to a Yoruban king. She crowned him during his coronation. She also functioned as an important political advisor and was respected for her knowledge and connection to the spiritual world. Choosing a wife as the subject for the veranda post of a palace made sense to a Yoruban, because they believed that the strong shoulders of women supported their community.

As important as his wife is, the king's crown, the source of his authority, is meant to be the center of our attention. His wife's eyes focus on it, and the bird's beak on top also draws our eyes there. The bird represents the female ancestors and deities who support the kingdom and are known to the Yoruba as "our mothers."

Olowe was well-versed in traditional art but was also an innovator in style. His work increased the depth of the open spaces within Yoruban art, while his figures are elongated rather than traditionally short. He trained many apprentices in his large workshop. He died in 1938 at the age of seventy-eight, but his legend lives on in one of the *oriki*, or praise songs of the Yoruba. The song tells of the many palaces where his work can be found and describes him as "One who carves the hard wood of the iroku tree as though it was soft as calabash, One who achieves fame with the proceeds of his carving." It ends with the story of one of Olowe's carvings being exhibited in London in 1924 and now in the collection of the British Museum. "There was a carved lion, That was taken to England, With his hands he made it."



Post of Enthroned King and Senior Wife (Opo Ogoga), 1910–1914.
Nigeria, Ekiti, Ikere. Wood, pigment. H: 152.5 cm ×
W: 31.75 cm × D: 40.6 cm.
1984.550. The Art Institute of Chicago. Photography © The Art Institute of Chicago.



18-9 Pablo Picasso, *The Old Guitarist*, 1903. Oil on canvas, $47\frac{3}{4}'' \times 32\frac{1}{4}''$. (Helen Birth Bartlett Memorial Collection). 1926.253. The Art Institute of Chicago. Photography © The Art Institute of Chicago



18-10 Mahongwe mask, Gabon, Africa, nineteenth century. Wood and pigments, 39" high \times 14" wide. The Brooklyn Museum, New York (purchase from Mr. Frederick R. Pleasants and Frank L. Babbott Fund).

The Old Guitarist (18-9) was done in Picasso's first original style, known today as his Blue Period. The world of the urban poor, the depressed, and those weak from hunger were painted in somber hues of blue, brown, and black. The old guitarist is emaciated; the length and thinness of his arms accentuate this. He is blind, but his blindness is like the Greek poet Homer's; it symbolizes wisdom. Like many artists and writers who had come to Paris, Picasso was young and struggling, not sure where his next meal was coming from. But these pictures of the Blue Period established Picasso as an artist to be watched. In 1906, when the famous art dealer Ambroise

Vollard (who represented Degas, Renoir, and Cézanne) visited the young artist's studio, he purchased every painting. Success would now follow the young Spaniard for his entire life.

Just as Gauguin became fascinated with primitive art in the previous generation, a taste for magical artifacts was developing among the young avant-garde. Introduced by Derain to African masks (18-10), Picasso felt the visual and psychological power in their simple, oversized geometrical forms. While Derain could never successfully incorporate their influence into his art, Picasso would in a way no one else could ever have imagined (see Global View box).

Only a year after his success with Vollard, Picasso made a picture that shocked not only his new dealer and the older artists of Paris but also the avant-garde. It was a product of his study of African masks and the then-legendary but rarely seen work of Paul Cézanne. In 1907, there had been a Cézanne retrospective in Paris that opened the eyes of the younger generation. In later years, Picasso would say of the Postimpressionist master: "Cézanne is my father; he was the father of us all." The imaginative combination of these two influences resulted in the most revolutionary picture of our century, *Les Demoiselles d'Avignon* (the women of Avignon) (18-12). Picasso

had leapt into the unknown with this picture, making a more radical break with Renaissance art than any previous artist. His women are prostitutes who display themselves to the viewer as if to a customer, but they are hardly enticing. Their bodies have been broken up into geometrical fragments and flattened. The fragments are reminiscent of the small panes of color Cézanne had used, but now Picasso has made them bold and geometric like the shapes of African masks. The composition of *Les Demoiselles d'Avignon* creates a new kind of space—everything, including the background, seems to press forward. There is no conventional negative space. All is foreground. The



18-12 Pablo Picasso, *Les Demoiselles d'Avignon*, Paris, June–July 1907. Oil on canvas, $8' \times 7' 8''$. The Museum of Modern Art, New York (acquired through the Lillie P. Bliss Bequest 333.1939).

placement and design of shapes and space seem to be determined merely by the whim of the artist. In the same way that the Fauves declared color could be arbitrary, now Picasso was declaring shapes and space could be as well. In his *Les Demoiselles d'Avignon*, a melon becomes flat with points as sharp as a knife, or a breast becomes a shaded square.

The painting is brimming with ideas and a variety of styles. There are even four different methods for the heads. Two seem clearly influenced by African masks, but the most bizarre is the head at bottom right. The parts of her face have been redesigned and reassembled as if she is being viewed from several angles at once. Picasso is deliberately ignoring one of the oldest design principles: a picture must be consistent to be successful. "Is life coherent?" he might ask. The fragmentation of this painting has been said to reflect the fragmentation of modern life, making *Les Demoiselles d'Avignon* a very twentieth-century picture.

Picasso's friends and supporters were stunned and hated the painting. "A horrible mess," said one. Matisse said it was "repulsive." Many thought Picasso had gone insane. Derain said it would not be long before Pablo would be "found hanging behind his canvas." The youngest of the Fauves, Georges Braque, had also been among those who were initially horrified by the "monstrous" painting. Later, Braque began to see that because *Les Demoiselles d'Avignon* blew apart many of the old conventions, it was rich with possibilities. Braque soon abandoned Fauvism and joined Picasso in one of the most famous collaborations in the history of art. Together they explored the consequences of this landmark picture, the first of **Cubism** (see Chapter 3).

Both artists had studios in the same building in an artist quarter in Paris. Soon their pictures were so similar that, without signatures, it would be nearly impossible to distinguish who had done which. To study their new structure, Picasso and Braque initially limited color in their work, a style called Analytical Cubism. The first Analytical Cubist pictures are a collection of views from different angles fused into a balanced design. Like Cézanne, they wanted to present a truer picture of the way we see, with eyes moving from one part to another. But as Picasso and Braque explored Cubism further and further, their work became more and more abstract; the arrangement of shapes became less like the source objects (see Braque's Violin and Palette, 3-26), and the design of the many shapes in the picture became more important than any representational function.

Picasso and Braque had created a new reality, one that existed only in the painting. Picasso declared that a picture should "live its own life." The Cubists were posing once more the crucial question of Modern Art: Should art be chained to visual appearances? Their answer, as seen in their works, is a loud "no!" Art can give us experiences that reality cannot, they would say. It is time for the artist to be liberated from the old requirement of recreating what anyone can see. While much of the public remained horrified by Cubist pictures, Cubism spread like wildfire in the next few years through the avant-garde in Europe and beyond.

Yet by 1912, Picasso wanted to find a way to bring the real world more directly into Cubist pictures. He did it by literally attaching bits and pieces from everyday life—inventing collage (see Chapter 5). The first was Still Life with Chair-Caning (18-13), where Cubist painting is mixed with a printed pattern of chair caning on it. Picasso used collage to play fast and loose with visual reality, to question its nature. In the picture, some letters from the French paper Le Journal appear as simulated collage, but they were actually painted on the canvas. This kind of deception forced viewers to examine his art closely, because one cannot always be sure what is paint and what is collage. Sometimes he and Braque might carefully recreate wood grain in paint, but in other pictures they would attach some actual wood. In later



18-13 Pablo Picasso, *Still Life with Chair-Caning*, 1911–1912. Oil and pasted paper simulating chair-caning on canvas, $10\frac{5}{8}" \times 13\frac{3}{4}"$. Musée Picasso, Paris.

collage-paintings, Picasso openly used real materials that had little to do with what is portrayed—a glass made of newspaper, for example. While these tricks keep the viewer in doubt, they also allow the viewer to enjoy surprises, to share in something like the artists' joy of invention. Picasso is constantly reminding us that art is by nature deceptive: an illusion constructed from materials, whether paint, stone, or wallpaper.

The same year, Picasso began translating Cubist space into three dimensions with Cubist **assemblages** (three-dimensional collages). Because one curving side of his *Guitar* of 1912–1913 (**18-14**) is larger than the other, we get the sense of Picasso moving back and forth as he looked at different parts of the guitar. We also get a sense of Picasso's perception and thought processes: the top of the guitar reminded him of a triangle; the center hole, a cylinder. Like so many Cubist works, *Guitar* is a report from the artist about what he saw and what he thought as he looked closely at an object.

While no one would be fooled into believing this collection of sheet metal and wire was an actual guitar, it is easy to identify. By 1912, the visual symbols Picasso made for the things he saw were becoming more playful, imaginative, and easily understood,

and marked the opening of a new phase called **Synthetic Cubism.** Less than a decade after its creation, the painstaking investigation of the possibilities of *Les Demoiselles d'Avignon* was over, replaced with the more open, even comical approach of the *Three Musicians* (18-15). In Synthetic Cubism, lively color reentered Picasso's pictures and expression, too. In the years to come, Cubism proved to be a very flexible style. Picasso would use it to create a variety of moods. His *Three Musicians* is playful and light, his *Girl before a Mirror* (2-8) loving and erotic. Yet Pablo Picasso's monumental *Guernica* (18-16) is universally acknowledged as one of the most forceful protests against war ever created.

While the painting's message is timeless, its catalyst was a single event. On April 26, 1937, during the Spanish Civil War, the small town of Guernica was attacked by German bombers supporting the Fascist armies of Generalissimo Franco. The town was still controlled by the republican government of Spain but had little military significance. Adolf Hitler's Luftwaffe used the attack as a test of the effects of saturation bombing—in preparation for World War II. The effects were catastrophic: much of the town was leveled; thousands died. Newspapers reported



18-14 Pablo Picasso, *Guitar*, Paris, winter 1912–1913. Construction of sheet metal and wire, $30\frac{1}{2}" \times 13\frac{1}{8}" \times 7\frac{5}{8}"$. The Museum of Modern Art, New York (gift of artist).



18-15 Pablo Picasso, *Three Musicians*, Fontainebleau, summer 1921. Oil on canvas, 6′ 7″ × 7′ 3³⁄4″. The Museum of Modern Art, New York (Mrs. Simon Guggenheim Fund).



18-16 Pablo Picasso, Guernica, 1937. Mural, 11' 6" × 25' 8". Centro de Arte Reina Sofia, Madrid.

that those who ran from the town were machinegunned by planes.

Living in France, but emotionally tied to his native Spain, Picasso responded to the atrocities with the largest canvas he had ever painted, more than twenty-five feet long and eleven feet high. Picasso's Guernica is not a recreation of a specific event but a universal message about the suffering of the innocent in war. Women, children, and animals are the main subjects, their bodies twisted and distorted by Cubist structure. Many look to the sky (toward God or bombers?), screaming. The space is confused; we seem to be both indoors and outdoors. Figures bump into one another. The Cubist style actually seems, in the hands of its master, to be peculiarly suited to express the victims' anguish, confusion, and panic. Only one soldier is present, a broken Roman sculpture symbolizing the end of the ancient heroic ideals of war. During the German occupation of France, some Nazi officers came to inspect Picasso's studio. One pointed to a postcard of the Guernica on the artist's wall and asked him, "Did you do this?" Picasso is reputed to have answered, "No, you did."

Throughout the first half of the twentieth century, Matisse and Picasso were rivals for the leadership of the modern movement. Matisse's genius was in his ground-breaking use of color, while Picasso's was his revolutionary use of form. Both had devoted, sometimes fanatical, followers. There was even a period early in the century when gangs of Picasso-istes roamed the streets of Paris and wrote

graffiti on walls claiming "Matisse causes madness! Matisse has done more damage than war!"They also threw darts (thankfully rubber-tipped) at Matisse canvases in exhibitions. But the rivalry of the two artists inspired them as they rewrote the history of art. Many times one was motivated to paint an even more radical picture after seeing the latest work of the other. Throughout their lives they traded canvases, which became prized possessions. As they aged, both agreed that the other artist was the only one who could truly understand his own work. When the older Matisse died in 1954, Picasso, one of the most prolific artists who ever lived, stopped painting for two weeks. Some time later, a friend asked about Matisse. Picasso only looked out the window and quietly said, "Matisse is dead, Matisse is dead."

Today, most art critics identify Picasso as the dominant artist of the twentieth century. His productivity, imagination, and range of interests redefined what being an artist meant. Up to the day he died in 1973, he was producing a stream of paintings, drawings, sculptures, etchings, woodcuts, lithographs, and ceramics (see photograph in Chapter 1, 1-44). He became the most famous and richest artist who ever lived. More important, Cubism became the bridge to most of the radical art of the twentieth century. His innovations of mixing media and exploring the artistic value of everyday objects would be exploited by Dadaists, Surrealists, and Pop Artists, among others. Yet, as revolutionary as Picasso's career may have been, it was never completely removed from the

visual legacy he inherited. In his seventies and eighties, he revisited the great masters of the past, painting Cubist versions of pictures by Delacroix, Manet, and even Rembrandt. It seems symbolic that he chose to live his old age and to be buried at the base of Mount Sainte Victoire—a mountain near the home of Paul Cézanne—as if to reaffirm his debt to the man Picasso called his father and to place himself firmly in the Western tradition.

ABSTRACTING SCULPTURE: BRANCUSI

Like painting, much of the sculpture in the twentieth century went in the direction of abstraction. We have seen this already in the Cubist sculpture of Picasso. One aspect of abstraction—refining form to achieve purity and clarity—was the driving force in the seminal sculptural abstractions of the Romanian artist, Constantin Brancusi (see photo 9-2).

Brancusi was born in a tiny peasant village in Romania, where as a young boy he was a shepherd. When the villagers saw his skill in carving (he had made a violin out of a crate), they raised the money necessary to send him to a school of crafts. After he graduated, Brancusi left for Paris, the magnet of his generation. However, he made his way more slowly than most, walking from Munich after his funds ran out. He later described this walk as one of the happiest experiences of his life. Fed by peasants in the villages, he sang all the way. Brancusi said that he learned on this walk how good it was to be alive and to be able to see the wonders of nature.

Brancusi arrived in Paris in 1904 at the age of twenty-eight and lived virtually the rest of his life there. For a short time, he worked as an assistant to Rodin, but soon left to work on his own, saying "nothing grows under the shade of great trees." Like many other modern artists, Brancusi was interested in the art of non-Western people, not just African but Egyptian, Buddhist, and Cycladic art as well. Their art showed him that simple, abstract forms had great visual and psychological power. He decided that:

What is real is not the external form, but the essence of things. Starting from this truth it is impossible for anyone to express anything essentially real by imitating its exterior. Or, put even more succinctly, "The sculptor is a thinker, not a photographer." He set out to create sculptures that were universal and stripped to the essentials.

Perhaps the greatest example of Brancusi's desire for purity can be found in his Bird in Space (18-17). Brancusi once wrote: "All my life I have been working to capture the essence of flight." Bird in Space is the last in a series of sculptures Brancusi made on this theme. The series was begun in 1910; early versions were called "Maiastra," after the beautiful golden bird in Romanian folktales. As this series evolved, each bird in succession was more abstract, more refined; in each, Brancusi came closer to showing the essence of flight. In the final version, we can see only the desire to move upward, to escape the force of gravity. Here he used bronze with a high degree of polish, so it seems machined rather than handmade. In fact, when Bird in Space was sent to the United States to be shown in a museum, customs officials confiscated it because they suspected it was military hardware.

Brancusi's clear, streamlined design inspired not only sculptors but also the industrial designers of the



18-17 Constantin Brancusi, *Bird in Space*, 1928? Bronze (unique cast), $54'' \times 8\frac{1}{2}'' \times 6\frac{1}{2}''$. The Museum of Modern Art, New York (given anonymously).

Bauhaus (see Chapters 11 and 19) and the pure, metallic symmetry used by International Style architects.

"ALL THINGS ARE RAPIDLY CHANGING": FUTURISM AND SPEED

The idea of a modern age was celebrated not only by visual artists but also by philosophers and writers. The high priest of international modernism was Filipo Tomasso Marinetti, an Italian poet, playwright, and professional agitator, known as "the caffeine of Europe." Independently wealthy, he preached the virtues of the new world created by technology. In 1909, he wrote the "Manifesto of **Futurism,**" coining a new term that was instantly in the mouths of avant-garde artists throughout Europe. Futurism was the credo of those who did not look back, who celebrated the age of the machine. Among the declarations in his manifesto were:

We affirm that the world's magnificence has been enriched by a new beauty: the beauty of speed.... A roar-

ing car . . . is more beautiful than the *Victory of Samothrace* [see figure 12–20].

Marinetti and his followers were nationalists and felt Italy's devotion to ancient greatness left it no more than a tourist mecca, preventing it from rising to new greatness:

For too long has Italy been a dealer in secondhand clothes. We mean to free her from the numberless museums that cover her like so many graveyards.

The solution Marinetti called for was brutal: Italians should flood the museums and burn the libraries:

We will destroy the museums, libraries, academies of every kind. . . . Come on, set fire to the library shelves! . . . Oh the joy of seeing the glorious old canvasses bobbing adrift on these waters, discolored and shredded! . . . We want no part of it, the past, we the young and strong Futurists!

Marinetti was a master publicist, and his ideas spread like wildfire throughout Italy. He traveled from city to city, organizing "evenings" in theaters designed to provoke violent responses from the conservative members of the audience. Crowds were drawn by posters advertising "opening nights." What



18-18 Umberto Boccioni, *The City Rises*, 1910–1911. Oil on canvas, 6' 6" × 9' 10". The Museum of Modern Art, New York (Mrs. Simon Guggenheim Fund).

they found instead was a mixture of art and politics, a series of challenges to their "mediocre bourgeois" values. An evening was considered successful when it ended in shouted insults, fistfights, flung rotten vegetables, and police intervention.

Umberto Boccioni was one of many young Italian artists who joined the new movement. His *The City Rises* (18-18), finished in 1911, shows how the Futurist painters adapted Cubism to create waves of muscular energy, each motion a series of steps reminiscent of multiple-exposure photography. The sweeping surges of movements make the whole picture a dynamic dance celebrating the building of the urban utopia. Man and animal pull the great enterprise into being.

Often, the ideology of the Futurists was ahead of their actual works of art. Marinetti's manifesto of 1909 declared a speeding car to be more beautiful than the Victory (or Nike) of Samothrace. No Futurist sculpture, however, had been made yet that could even challenge that masterpiece of the Greeks until Boccioni created his *Unique Forms of Continuity in Space* (18-19) four years later. Here the complex-

ity and variety of movements seen in *The City Rises* were translated into three dimensions. Inner and outer forces pull at the solid figure, shaping it. Moving like a twentieth-century gladiator, this machine-like man is built of bronze; his head is a helmet and his arm a shield. His stride is confident, surging forward, but the memory of his past movements linger on, drag on him. Here is the Futurist hero for the technological age, shedding past remnants and moving to battle and victory.

Calling for war was also part of the Futurist manifesto. Marinetti declared in 1909: "We will glorify war—the world's only hygiene—militarism, patriotism . . . beautiful ideas worth dying for." When war came in 1914, the Futurists joined eagerly, plunging into what would become a European holocaust, with the same speed they plunged into all of their actions.

Like European culture as a whole, Futurism was never the same afterward. Still, the Futurist spirit left a lasting legacy for twentieth-century art; their call for "courage, audacity, and revolt" replaced the nineteenth century's "liberty, equality, and fraternity" as bywords for the Modern Art movement.



18-19 Umberto Boccioni, *Unique Forms of Continuity in Space*, 1913. Bronze (cast 1931), 43 %" × 34 %" × 15 ¾". The Museum of Modern Art, New York (acquired through the Lillie P. Bliss Bequest).

MODERN WARFARE FOR A MODERN WORLD: WORLD WAR I

Clearly, a widespread desire for change charged the air at the turn of the last century. After a leisurely progression of art movements that lasted centuries, suddenly an explosion of many art movements occurred in a very short period. These reflected the thrill of progress as the world entered a new technological era and the shared excitement of young people (exemplified by the Futurists) over a future that seemed limitless in potential. The confident and enthusiastic mood was shaken profoundly by the events that followed June 28, 1914.

On that day, Archduke Francis Ferdinand, heir to the Austro-Hungarian Empire, was assassinated. His murder precipitated, through a complex series of political alliances, the drawing of the entire Western world into the bloodiest conflict ever seen, now called the *First World War*. In this conflict, the glorious modern machinery beloved by the avant-garde was transformed into awesome modern weapons of destruction. Submarines, poison gas, and air, tank, and trench warfare all made their first appearance in World War I. Battleships, barbed wire, machine

guns, and heavy artillery were used on an unprecedented scale.

Few sensed the horrors to come at the war's outset. After nearly forty-five years of peace, the declarations of war filled the young and old of Europe with eagerness. Nationalism seemed to swell the hearts of all; heroic thoughts were in the soldiers' minds. When the brave warriors got to the front lines, they entered a labyrinth 450 miles long, known as the "western front." There, the horrifying conditions of the grim trenches shattered their naïve illusions. Soldiers were stuck below ground for months on end, knee deep in mud and water, listening to regular bombardments and the screams of the wounded, waiting for the murderous poison gas. Above them was a landscape covered with barbed wire and craters. According to Robert Graves, a novelist and British soldier:

The Western Front was known among its imbittered inhabitants as the Sausage Machine because it was fed with live men, churned out corpses, and remained firmly screwed in place.

The final cost of this miserable "Great War" was sixteen million dead and twenty million more wounded, maimed, or missing. The Allied victory, according to Winston Churchill, was "bought so dear as to be almost indistinguishable from defeat." The young (better described as "once young") who survived became known as the "lost generation." The dream of progress was dead by the war's end.

DADA: TO ONE MADNESS WE OPPOSE ANOTHER

Idealism could be said to have been one of the earliest casualties of the war. By 1915, Zurich, Switzerland, had already become a sort of refugee camp for intellectuals, artists, Communists, and anarchists who had seen the uselessness of the war and had lost faith with their political leaders. The small, proper provincial town in a neutral country had been transformed into a hotbed of avant-garde activity and the birthplace of an international movement called **Dada**.

Convinced that the war was "horrible and stupid," the Dadaists wanted to launch their own war—a war on the conventional way of thinking that had guided Europe into the conflict. They believed that the Great War demonstrated that old beliefs and ideals were worthless and could only

lead to disaster. It was time for the world to begin again; all traditional ways of thinking had to be shattered by poetry and painting. Or, as the chronicler of the movement and artist, Hans Arp, said: "Losing interest in the slaughterhouses of the world war, we turned to the fine arts."

Why the name *Dada*? According to Arp: "It means nothing, aims to mean nothing, and was adopted precisely because it means nothing." A Dada handout offered a reward "to the person who finds the best way to explain Dada to us." Dada art was anarchic and humorous but also deadly serious. Following the Futurist model, performances were organized and designed to frustrate and confuse audiences. One of the more notorious performances came after running an ad in a local newspaper that Charlie Chaplin was appearing for three dollars at a theatre. Once the large audience had become impatient for the famous actor's arrival, the Dada artists came on stage and chanted:

No more aristocrats, no more armies, no more police, no more countries, enough of these imbecilities, no more nothing, nothing, nothing.

Dada manifestos called for the destruction of all values—the end of art, morality, and society. This "anti-art" was an effort to evolve a new way of thinking, feeling, and seeing. Their pictures, writing, and performances were an invitation to utter confusion, a series of blows against accepted values. Dadaists were not interested in intellectual responses; they preferred violent ones. Dada performances typically ended with yelling insults from the stage at the disappointed listeners, who often responded in kind. Fistfights were deliberately instigated, because the Dadaists equated anarchy and chaos with true freedom.

Marcel Duchamp and International Dada

When Marcel Duchamp arrived in New York City in 1915, he was already a notorious figure in the United States because of his contribution to the Armory Show (see Art News box). However, Duchamp's early controversial painting, *Nude Descending a Staircase* (No. 2) (18–20), would seem rather conventional when compared to his next scandalous work, one of the seminal objects of Dada. In 1917, Duchamp was one of the organizers of an exhibit at the Society of Independent Artists in New York City.

RT NEWS

Modern Art Invades America: The Armory Show

n 1913, the most important exhibition in the history of the United States took place. Called The International Exhibition of Modern Art, the show had been conceived initially as a large exhibition of a group of advanced (for America) artists who lived in New York City. Later, the organizers decided to make the show a complete survey of Modern Art by showing Europeans. They accumulated



so much artwork that a National Guard Armory in Manhattan was chosen as the only place large enough to accommodate them. More than thirteen hundred works by three hundred artists were exhibited in what would come to be known as the Armory Show. Even though only one-quarter of the exhibition was devoted to European artists, to the chagrin of the Americans, the foreigners stole the show. Their work outraged America and became front-page news. More than half a million people came to see the show, many as curiosity seekers, of course. But for the first time, Modern Art gained the attention of the New World.

In an exhibition that introduced Gauguin, Cézanne, van Gogh, Munch, Monet, Picasso, and Braque, there was much to shock the public. The *New York Times* said the whole show was "pathological." But it was Marcel Duchamp's *Nude Descending a Staircase (No. 2)* (18-20) that became the scandal of the show. To anyone familiar with Futurism (which few Americans were), the picture does not seem so radical. Duchamp was using

18-20 Marcel Duchamp, *Nude Descending a Staircase (No. 2)*, 1912. Oil on canvas, 4′ 10″ × 2′ 11″. Philadelphia Museum of Art (Louise and Walter Arensberg Collection).

Secretly, Duchamp submitted *Fountain* (18-22), a porcelain urinal signed "R. Mutt 1917." The work was literally thrown out of the show. Pretending to be appalled by the conservatism of his supposedly avant-garde fellow artists, Duchamp immediately resigned from the society and published a spirited defense of the work, entitled "The Richard Mutt Case." In his essay, he responded to their charges of plagiarism and immorality:

whether Mr. Mutt [actually the name of a plumbing fixture manufacturer] with his own hands made the fountain or not has no importance. He CHOSE it. He took an ordinary article of life, placed it so that its useful significance disappeared under the new title and point of view—he created a new thought for that object. . . . Mr. Mutt's fountain is not immoral, that is absurd, no more than a bathtub is immoral. It is a fixture that you see every day in plumbers' show windows.

Fountain was what Duchamp called a "ready-made," art that asserted a new right for the artist: Anything an artist says is art is art. Because of this, Duchamp opened up the possibility that countless everyday items could be art. The genre art of Bruegel, where ordinary life was declared a new subject for great artists, had now evolved into an art of house-hold objects. Duchamp's exhibited ready-mades ran

ART NEWS

a Cubist approach to explore motion. He also was influenced by the then-new multiple-exposure photographs that revealed the many aspects of movement. Most viewers were genuinely puzzled by Duchamp's work (at least those who could get close enough to see it once it became notorious and surrounded by crowds). The American magazine *ArtNews*, tongue-in-cheek, offered a prize for the best explanation of it. One critic described it as an "explosion in a shingle factory." Ridicule was common; the *Evening Star* mocked the painting in its *The Rude Descending a Staircase* (18-21), but at least the editorial cartoonist had understood what Duchamp was trying to portray.

It became almost a patriotic cause to attack these foreign intruders. Offended artists and critics, high school teachers, and ministers called the art immoral and indecent. Even former president Theodore Roosevelt felt obliged to comment on the exhibition. Like most, he criticized almost all of the exhibited work, but he also showed some understanding:

There was one note missing . . . and that was the note of the commonplace. . . . There was no stunting or dwarfing, no requirement that a man whose gifts lay in new directions should measure up or down to stereotyped and fossilized standards.

He seemed to suggest that perhaps Modern Art contained something close to the American ideal.

The show, despite or because of its notoriety, turned out to be a financial success in terms of sales. But to the American artists' lasting humiliation, most of the sales were made by the scandalous Europeans. The most innovative American work now appeared cautious and old-fashioned. For the next three decades, forward-thinking American artists would turn their eyes toward Europe.



18-21 The Rude
Descending a Staircase
(Rush Hour at the
Subway), a cartoon that
appeared in the New
York Evening Sun on
March 20, 1913. The
Museum of Modern
Art Archives, New
York: Armory Show
Scrapbook (1913),
compiled by Harriet
S. Palmer. (MA 172/
MMA 20.504)



18-22 Marcel Duchamp, *Fountain*, 1917 (replica, 1964). Selected object, $12'' \times 15'' \times 18''$. Tate Gallery, London.

the gamut from bottle drying racks to snow shovels (called *In Advance of a Broken Arm*).

Perhaps the quintessential Dada work was his *L.H.O.O.Q.* of 1919 (1-23). By scribbling a moustache and goatee on a cheap postcard of the *Mona Lisa*, Duchamp defiled and ridiculed what the cultured public generally acknowledged as the greatest" artwork ever made. That simple act was intended to dynamite the pillars of culture, declaring the urban

renewal of the entire Western tradition. Like Futurism, Dada pronounced the icons of the past (exemplified by da Vinci's masterpiece) worthless rubbish to be discarded.

The Dada aesthetic motto was "beautiful as the chance encounter on an operating table of a sewing machine and an umbrella." Gift (18-23) is an example of the motto put into practice. By creating an unusual combination of everyday items, tacks and an iron, Man Ray, an American friend of Duchamp's, produced a visually powerful creation. His use of juxtaposition—a technique where unrelated objects are taken out of their normal context and joined together, producing a new unique object—opened a new area for artistic exploration. Man Ray called such objects either "indestructible objects" or "objects to be destroyed" and often did smash them. This was the ultimate Dada act, subverting the old notion of art being permanent and deriding the value of immortality. It made the guards in the museums and the notion of masterpieces ridiculous. Other Dadaists caught the iconoclastic mood. One German artist even attached an ax to one of his sculptures with a note encouraging viewers to take a swing at his artwork.

By 1922, there were active centers of Dada activity in Berlin (see Hannah Hoch, 7-16), Paris, Zurich, and New York City. The movement, however, had already crested. The ensuing rapid disintegration of Dada might be seen as the natural culmination of its own manifesto. If anarchy was one's supreme goal, then how could one belong to a movement? Some Dadaists even took actions to encourage its dissolution (for example, sending unsigned insulting letters to their colleagues). By 1923, there were only a few scattered members left in Europe and the United States. The Dada moment had passed.

The New Objectivity

Embittered by the shattering ordeal of World War I, German Expressionism's very nature changed. Ernst Ludwig Kirchner, its leader, suffered a mental breakdown during the war and was hospitalized. Compare his *Self-Portrait as Soldier* (18-24) to his earlier portrait with a model (18-4). The composition is similar: The artist pushed forward on the left with his model behind him on the right. But the toll of the war is now very apparent. The confident, pipesmoking young bohemian has been replaced by a pale, sunken-cheeked soldier with a butt hanging

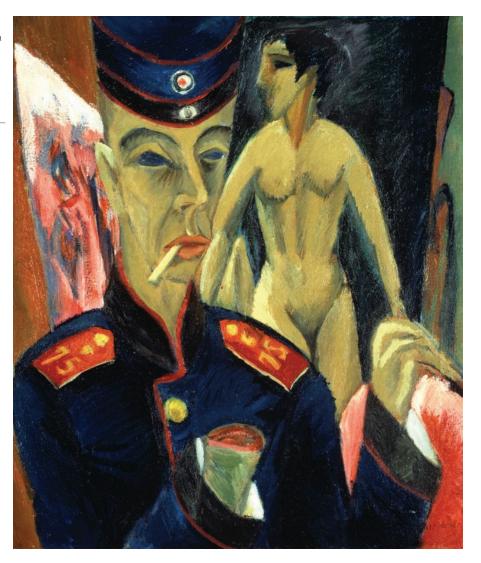


18-23 Man Ray, *Gift*, replica of lost original of 1921. Painted flatiron with nails, 6 ½" high. Museum of Modern Art. New York.

from his lips. He has aged far more than eight years; his eyes are empty, his look cynical. He holds his painting arm, whose end is a cleanly cut stump, up to the viewer. The only sign of life is the model who now stands shamelessly naked. But she no longer stares lovingly at the symbolically emasculated artist. While never physically injured himself, Kirchner's painting reminds us that the wounds he and many others suffered were both physical and spiritual.

In 1914, Otto Dix had been an "enthusiastic volunteer" of twenty-three. Trained as a machine gunner, he served four years in the front lines. There, Dix was able to see firsthand the results of modern weaponry as the enemy died in his spray of bullets. Like many other veterans who returned from the war, Dix was shocked to see that his homeland seemed unaware of what he had experienced. His countrymen were all too eager to return to the illusions of the previous happier age. In response, Dix became a leading member of a recast Expressionism called

18-24 Ernst Ludwig Kirchner, *Self-Portrait as Soldier*, 1915. Oil on canvas, 27 ½" × 24". © Ingeborg & Dr. Wolfgang Henze-Ketterer, Wichtrach/Bern. Allen Memorial Art Museum, Oberlin College, Ohio (Charles F. Olney Fund).



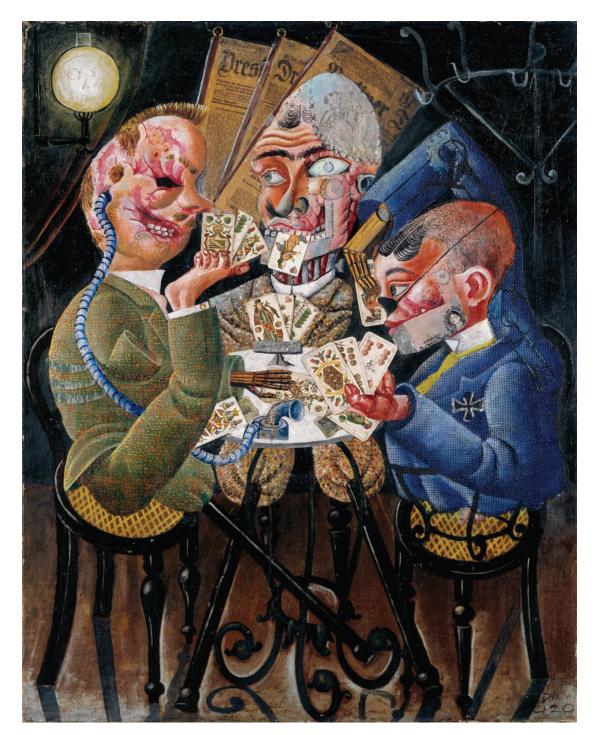
The New Objectivity. Their goals, he said, were to "show human being in all its grandeur, but also in all its depravity, indeed its brutishness." These Expressionists would have "the courage to portray ugliness, life as it comes."

With Cardplaying War-Cripples (18-25), Dix confronted his fellow Germans with the real consequences of the Great War and cruelly mocked modern science's pathetic attempts to rebuild the maimed young survivors. The card players in this picture are alive but less human than before. Little more than repulsive half-robots, with clumsily sewn eye sockets and tubes stuck in their faces, they are the useless refuse of war; their lives are over. Dix's grotesque images were meant to cut through the atmosphere of self-delusion and denial among the German populace that he felt was suffocating him.

Käthe Kollwitz (see *Self-Portrait*, 4-4), unlike Dix, was an artist who engaged in the struggles of her time as an outspoken advocate, not as a bitter outsider. She wrote:

I believe that there must be an understanding between the artist and the people. In the best ages of art that has always been the case. . . . I want to have an effect on my time, in which human beings are so confused and in need of help.

Many of Kollwitz's drawings were designs for posters to be used by humanitarian and socialist organizations. Like Dix, Kollwitz illustrated the suffering that the German government tried to ignore. This did not go without notice. When she won a prestigious prize, a government official canceled it, declaring her work "gutter art."



18-25 Otto Dix, *Cardplaying War-Cripples*, 1920. Oil on canvas with montage, $43\frac{1}{4}'' \times 34\frac{1}{4}''$. Nationalgalerie, Staatliche Museen zu Berlin, Germany.

In the 1920s, Germany had its great depression. Devastated financially by the First World War, Germany experienced overwhelming inflation that forced a large part of the population into poverty. There were food riots and starvation. In *Bread!* (18-26), Kollwitz shows a mother whose children are

hungry but who has nothing to offer them. Kollwitz was unique in her ability to translate abstract social problems into the real burdens that human beings were facing. These problems, unfortunately, remain widespread, which accounts for the enduring power of her art.



18-26 Käthe Kollwitz, *Bread!*, 1924. Lithograph. Fine Arts Museums of San Francisco, Aschenbach Foundation for Graphic Arts, #1963.30.874

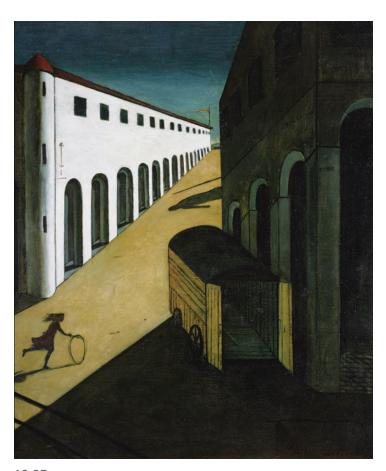
SURREALISM

With the disintegration of the Dada movement, many former Dadaists reorganized under a different flag. Once again they searched for an alternative to a conventional view of reality. They found inspiration in the work of the Viennese psychiatrist, Sigmund Freud, whose discovery of the unconscious and the meaningfulness of dreams had changed the twentieth-century picture of the human mind. This new movement was called **Surrealism**, a word meaning "more real than reality," an art of dreams and the irrational unconscious.

Freud contended that beneath our veneer of rationality, in the unconscious portion of our minds, there lies a world of intense, barely suppressed desires (especially sexual urges). Our dreams, however, give us ways to express feelings that ordinarily have to be suppressed in a symbolic way. So rather than being simply confusing and irrational, dreams are rich in meaning once their symbols are analyzed. In dreams and irrationality, the Surrealists found a fertile world of fantasy and imagination. The unconscious, according to Freud, was also the key to our

creativity and emotions. By giving our unconscious a "voice," the Surrealists intended to complete our picture of the world and gain access to the source of imagination. They were therefore confronted with a challenge: How to visualize the irrational unconscious, the unexplainable? How could they make an art of dreams?

The Surrealists of the 1920s found a forerunner of their movement in a relatively unknown Italian painter, Giorgio de Chirico. Without access to the works of Sigmund Freud, he had intuitively created what he called "Metaphysical Pictures" even before World War I. By setting his paintings in landscapes that did not follow the rules of perspective but were painted in a recognizable manner, he was able to evoke the seemingly real but ultimately confusing nature of the dream state. In *Mystery and Melancholy of a Street* (18-27), the mathematical certainty of the Renaissance arcade on the left becomes uncertainty when compared to the one on the right. These arcades lead to two irreconcilable vanishing points (see "Linear



18-27 Giorgio de Chirico, *Mystery and Melancholy of a Street*, 1914. Oil on canvas, 341/4" × 281/8". Private collection.

Perspective," Chapter 3). An empty boxcar sits in the foreground, enhancing the eerie loneliness of the scene. The frightening quality of a dream is evoked by the interplay between the small girl at play and the long, dark shadow of a figure with a spear above her.

Surrealist Juxtaposition

The Surrealists were committed to the liberation of sexual impulses as the first step in building a better world. Employing the Dadaist technique of illogical juxtaposition, Meret Oppenheim created an unforget-table and oddly sexual Surrealist sculpture—Object (Le Déjeuner en fourrure), often known as Luncheon in Fur (18-28).

By covering a common cup, saucer, and spoon with fur, she altered them profoundly and released many troubling associations. Think of using the fur cup in a conventional way. The connection of two primal urges (thirst and sex) underlies what at first seems only a humorous object but is actually much more disturbing.

Dalí

One of the eerie qualities of dreams is that they look so real while we are asleep. To show dreams in vivid reality, some Surrealists ignored the revolutionary techniques of modern times and returned to the precise techniques of the Baroque masters of Holland and Spain. Salvador Dalí was the greatest master of this style of Surrealism. By bringing a superb realistic technique to Surrealism, he could make bizarre images seem believable.

The setting of Dalí's *The Persistence of Memory* (18-29), as in most of his pictures, is a lovely and timeless Mediterranean. In this pleasant landscape reside several strange objects. From left to right, we see a pocket watch with ants crawling on it; a flaccid watch, melted as if made of wax; and another watch hanging limply from a dead tree. An even more disquieting object is placed in the center of this vision—another melted watch hangs over what seems to be a piece of flesh. Complete with eyelashes, it looks as if someone has torn off the side of his or her face and left it on the sand, like a dead fish. In addition to the irrational juxtaposition of these strange objects, their size and scale are confusing, as things often are in dreams.

What does Dali's picture mean? The artist did not offer much assistance:

My enemies, my friends and the general public allegedly do not understand the meaning of the images that arise and that I transcribe into my paintings. How can anyone expect them to understand when I myself, the "maker," don't understand my paintings either. The fact that I myself, at the moment of painting, do not understand their meaning doesn't imply that they are meaningless:



18-28 Meret Oppenheim, Object (Le Déjeuner en fourrure), 1936. Fur-covered cup, saucer, and spoon; cup 4¾" diameter; saucer, 9¾" diameter; spoon, 8″ long; overall, 2¾" high. The Museum of Modern Art, New York.



18-29 Salvador Dalí, *The Persistence of Memory*, 1931. Oil on canvas, $9\frac{1}{2}$ " \times 13". The Museum of Modern Art, New York (given anonymously).

On the contrary, their meaning is so deep, complex, coherent, and involuntary that it eludes simple analysis of logical intuition.

In other words, one should not be surprised that successfully irrational pictures should be incomprehensible. Otherwise, they would not be "images of concrete irrationality."

One of Freud's discoveries in dream analysis was that events and objects could have several meanings at once. Dalí was able to create the visual equivalent of this idea in his *Apparition of Face and Fruit-Dish on a Beach* (18-30). Although it may not be initially perceptible, the entire picture is filled with a giant dog. His eye is also a cave (18-31), his body also a fruit bowl. The fruit bowl is also a face. Once we understand Dalí's method, this entertaining puzzle manages to lift us out of ordinary existence. We are

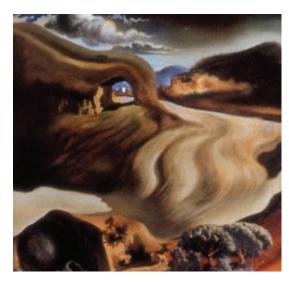
able to look at the picture with fresh, searching eyes and do not take any part of the image at face value. That is the liberation of Surrealism.

Magritte: The Real World on Trial

René Magritte offered liberation to his viewers by undermining their confidence in the most ordinary things. The Treachery (or Perfidy) of Images (18-32) borrows the format of a typical children's book. Written below the simple image of a pipe is the sentence Ceci n'est pas une pipe, which translated reads, "This is not a pipe." Magritte explained that his titles "were chosen to inspire a justifiable mistrust of any tendency the spectator might have to over-ready self-assurance." Magritte wanted to make the viewer conscious of the limitations of signs, labeling, and language. For



18-30 Salvador Dalí, *Apparition of Face and Fruit-Dish on a Beach*, 1938. Oil on canvas, 45" × 56%". Wadsworth Atheneum, Hartford, Connecticut (Ella Gallup Sumner and Mary Catlin Sumner Collection).



18-3 Detail of figure 18-30.

example, snow has various qualities, so the Eskimos have many names for its different types. Yet in English we lump them all under the word *snow*. What do we miss when we generalize? What have we, by habit, become blind to when we say the word *snow* or *pipe* and stop looking? Simple identification is a prison that prevents us from seeing our world fully.

Magritte felt that our sense of what is normal constrains us. True freedom cannot exist until the fabric of normalcy is destroyed. Like Dalí, Magritte also pictured the impossible realistically. But unlike Dalí's, Magritte's scenes are set not in a distant ideal landscape but in a familiar, almost banal world. In 1939, Magritte explained his approach:

I painted pictures in which objects were represented with the appearance they have in reality, in a style objective enough to ensure their upsetting effect. In *L'Empire des lumières* (The Empire of Light) (18-33), for example, it is nighttime at street level, but above the trees it is day. Both parts of the picture are absolutely convincing, and the transition between the times of day even seems completely natural. What is portrayed looks normal but cannot be. In this surreal world, nothing is for certain, and things cannot be explained logically. Like ours, perhaps.

When René Magritte undermined language, signs, and conventional perceptions, he undermined all that makes us feel secure. Like many artists of the early twentieth century, he felt obligated to question what was once unquestionable, or, in his words, he was "putting the real world on trial." Along with the other artists in this chapter, he did this not simply to disturb us but to open our eyes to "an infinity of possibilities now unknown in life." His challenge to all of us is to see with fresh eyes, without prejudice. His aim was to return to us the full power of seeing.



18-32 René Magritte, *The Treachery of Images,* 1928–1929. Oil on canvas, 64.6×94.1 cm. Los Angeles County Museum of Art, California.



18-33 René Magritte, *L'Empire des lumières*, 1954. Oil on canvas, 4' 11½" × 3' 8½". Músee d'Art Moderne, Brussels, Belgium.

CHAPTER 1

The Invisible Made Visible: Abstract and Nonrepresentational Art

CROSSING THE FRONTIER

rt lovers who followed the avant-garde art movements of the early twentieth century witnessed some shocking changes. Traditional manners of representation that had been considered the essence of art for centuries—beauty, logic, realistic space, literal color, solid objects—were discarded enthusiastically. While many artists broke fresh ground, few were more revolutionary than Pablo Picasso. His treatment of color and form demolished barriers that had seemed impregnable only a few years before. Yet even he respected one

	PERIOD	HISTORICAL EVENTS	
1910-1930	Non-representational art De Stijl The Bauhaus The International Style	World War I 1914–1918 League of Nations founded 1920 Regular radio broadcasts begin 1920 Mahatma Gandhi leads independence movement in India from 1921 James Joyce, <i>Ulysses</i> 1922 Louis Armstrong joins King Oliver's band 1922	Gershwin, <i>Rhapsody in Blue</i> 1923 Kafka, <i>The Trial</i> 1925
1930-1945	The International Style Straight photography Documentary photography Surrealist photography Exodus of artists and intellectuals to the United States from Europe	The Great Depression in United States 1930–1939 Steinbeck, <i>The Grapes of Wrath</i> 1939 World War II 1939–1945 Attack on Pearl Harbor 1941 Penicillin discovered 1943	Nuclear bombs exploded over Hiroshima and Nagasaki 1945
1945-1965	Abstract Expressionism The New York School Color field painting The International Style	United Nations founded 1945 Beginning of Cold War 1946–1949 Independence movements in Europe's African and Asian colonies 1940s–1950s–1960s Mao Zedong unites China under Communism 1949	Samuel Beckett, Waiting for Godot 1952 Discovery of DNA 1953 Television supplants radio in United States 1950s Building of Berlin Wall 1961

ultimate barrier. While some of his Analytical Cubist compositions were very abstract, Picasso never made a completely nonrepresentational picture. All his art referred to the real, visible world in some way. It was his primary source of inspiration. As a young man, Picasso had seen that Paul Cézanne's work was pointing toward a new, more radical direction for painting—the style of Cubism. Beginning around 1912, other artists began to see that Cubist pictures were pointing toward an even more revolutionary type of art—one that would be completely liberated from the visible world, that could be created only out of pure colors, lines, and shapes. What appeared to be the last frontier for artists was about to be explored.

No one can deny that nonrepresentational art is challenging to the viewer. However, by looking at its first practitioners closely, we will be able to understand the natural progression that led to its creation.

THE SPIRITUAL PATH TO NONREPRESENTATION

Even early in life, Vasily Kandinsky had extraordinary sensitivity to color. When he heard music that moved him, he would close his eyes and see the music in colors. When the young Kandinsky saw a show of Claude Monet's paintings for the first time, he noticed only the colors and did not realize that the pictures were landscapes until he read the catalog. It was one of his first hints that a subject from the visible world would not be necessary for all art.

Kandinsky wanted to show the "inner mystical construction of the world." The latest discoveries in physics seemed to support his own intuition that an underlying invisible force holds our universe together—something called by the physicists "energy." Kandinsky felt that color could show this energy. In paintings like Blue Mountain (19-1), Kandinsky simplified his drawing to open up wider areas for bright

ART



Kandinsky, Painting No. 199 1914



Georgia O'Keefe, Abstraction Blue 1927



Le Corbusier, Villa Savoye 1929-1931



Renato Bertelli, Head of Mussolini 1933



Marcel Breuer. Club Chair 1925

Man Ray, Le Souffle 1931



Dorothea Lange, Migrant Mother, Nipomo Valley 1936



Frank Lloyd Wright, Falling Water 1936 -1939



Jackson Pollock at work 1951



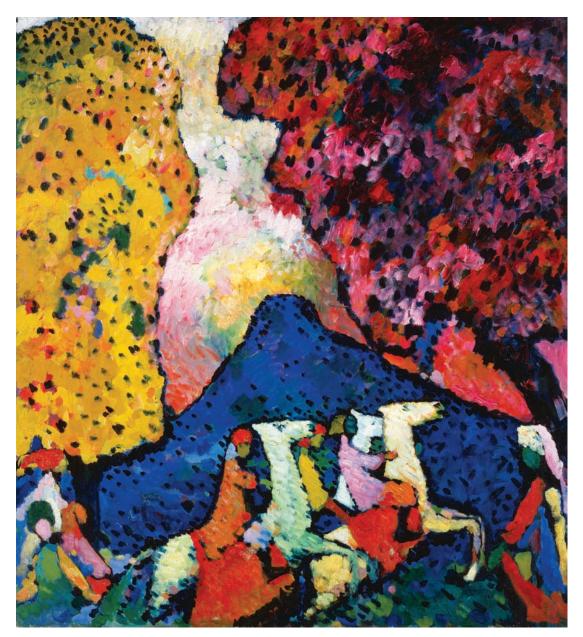




Philip Johnson and Mies van der Rohe, Seagram Building 1956-1958



Cubi XII



19-1 Vasily Kandinsky, *Blue Mountain*, 1908. Oil on canvas, $41\,\%$ × $37\,\%$. Solomon R. Guggenheim Museum, New York. 41.505.

colors. Life's intensity was evoked by using unmixed, brilliant hues of yellow and red in the trees against the blues of the mountain itself. These colors vibrate vividly together. Despite the obvious power in colorful canvases like *Blue Mountain*, Kandinsky remained dissatisfied. He realized, little by little, that to show the spiritual nature of the cosmos, he needed to abandon all reference to the physical world.

Between 1909 and 1913, elements of the visual world were slowly transformed into more and more abstract symbols. During 1913, Kandinsky painted

the first nonrepresentational paintings, pictures in which lines, shapes, and colors are independent elements and no longer refer to the real world (19-2). Each appears to have a life of its own; lines and shapes move in many directions and almost shove each other aside in an attempt to be noticed. Our eyes are pulled in many directions, and it is difficult to focus on any part of the composition for very long. We are witnessing Kandinsky's own struggle to organize his pictures, to orchestrate energy. His first abstract pictures seem chaotic, because he is painting

in a new world where none of the old rules seem to apply. Now, the issue was no longer how to obtain absolute freedom, but how to control it.

Pink Accent (2-27) demonstrates how Kandinsky found ways to organize nonrepresentational painting. He used two large color fields of magenta and gold as a background to unify the picture. To make sure the fields remained in control, he kept the other pictorial elements relatively small in relation to them. By using lively colors and varying the sizes of the circles and squares, Kandinsky was able to achieve a balance that is dynamic but not chaotic. Although Pink Accent is a totally nonrepresentational picture, it does have a "natural" feeling to it. The geometric shapes shift like colorful planets in space. They exude animation and energy.

At the end of his life, Kandinsky was in complete command of a totally abstract art. Pictures like *Dominant Curve (Courbe dominante)* (19-3), are celebrations. Overflowing with creativity, Kandinsky is now uninhibited by earlier fears of chaos. Each line, color, and shape has its own mood, its own personality. These pictorial elements dance around, floating freely, like many characters joined together in harmony.

19-2 Vasily Kandinsky, *Painting No. 199*, (Panel for Edwin R. Campbell No. 2), 1914. Oil on canvas, 641/8" × 483/8". The Museum of Modern Art, New York (Nelson A. Rockefeller Fund, by exchange).



MONDRIAN: A LOGICAL APPROACH TO NONREPRESENTATION

The variety in Kandinsky's paintings demonstrates that he had discovered a fertile field for exploration. The Dutch artist Piet Mondrian also created a totally abstract art, nearly simultaneously with Kandinsky. In 1911, he began a series of tree pictures that logically progressed toward abstraction. In a search for nature's underlying geometry, he broke down the trees' limbs into curving lines and the open spaces between them into planes. Over the next three years, in order to bring more order to his canvases, he replaced curves with horizontal and vertical lines, creating an abstract pattern. In the process, Mondrian learned that composition and harmony were more important to him than recording the details of an ordinary subject. Although he once embraced cubism and learned much from Picasso, he soon felt the Cubists had lacked the courage to follow their discoveries to total abstraction—their logical conclusion. He would not hesitate to go further.

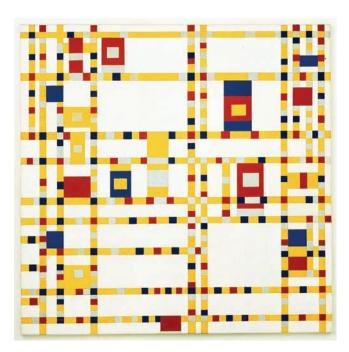
Mondrian wanted to make a painting that could be universally understood by people from any culture on earth—a pure painting that would



19-3 Vasily Kandinsky, *Dominant Curve (Courbe dominante)*, April 1936. Oil on canvas, 50 %" × 76 ½". Solomon R. Guggenheim Museum, New York. 45.989.



19-4 Piet Mondrian, *Tableau 2, with Yellow, Black, Blue, Red, and Gray,* 1922. Oil on canvas, 21 %" × 21 %". Solomon R. Guggenheim Museum. © 2008 Mondrian/Holtzman Trust c/o HCR International Warrenton, VA.



19-5 Piet Mondrian, *Broadway Boogie Woogie*, 1942–1943. Oil on canvas, 50" × 50". The Museum of Modern Art, New York. © 2008 Mondrian/Holtzman Trust c/o HCR International Warrenton, VA.

make sense to an Australian aborigine as well as to a European (unlike *The Last Supper*, for example). To create his universal painting, Mondrian decided he needed to simplify visual art to its essence and create perfect images that reflected pure visual harmony. It would have to be an art that depended on no illusions like depth but was flat and direct. He wrote that:

All painting is composed of line and color. Line and color are the essence of painting. Hence they must be freed from their bondage to the imitation of nature and allowed to exist for themselves.

In the early 1920s, his lines became bolder and firmer, his colors were pure primaries, and his compositions even more simplified (19-4). To many viewers, all Mondrian's pictures from this era look exactly the same. However, when they are studied with a sensitive eye, it becomes clear that many different pictures and different feelings can be created even with the simplest elements. While Mondrian reduced art to its pure basics, for him the weight and length of each line and width and area of every color had its effect on the whole mood of the painting. Although there is a mathematical feel to his art, Mondrian despised formulas. He believed that artists had to be intuitive and approached all of his paintings with that attitude.

In 1940, Mondrian left Europe to escape the impending Nazi invasion and came to New York City. It was love at first sight. He adored Manhattan: the rectangular shapes of its skyscrapers, the way its streets were laid out in a grid. He must have been struck with the similarity of the city's appearance to the designs of his pictures. In his New York studio, Mondrian kept a record player on which he played loud "boogie-woogie" music (jazz) while he painted; its upbeat tempo affected his last paintings. The calm and stability of his earlier pictures was replaced by a new spirit, the tones of the modern metropolis. One can almost hear the honking taxi cabs in *Broadway Boogie Woogie* (19-5).

DE STIJL

In Holland, during World War I, Mondrian's ideas and approach to art had been translated by followers into a movement called *De Stijl* ("the style"). The Dutch artists proposed "finding practical solutions to universal problems" and believed a pure universal style in art and architecture could be the solu-

tion to humanity's misery. They declared that "art and life are no longer two separate domains. . . . We demand the construction of our surroundings according to creative laws." De Stijl artists designed furniture and buildings using flat geometric areas filled with primary colors, like Mondrian's paintings. Gerrit Rietveldt's Schröder House (19-6) is one of the best examples of De Stijl architecture, a threedimensional equivalent of Mondrian's pictures. Built in 1924 in Utrecht, Holland, it follows the strict vertical and horizontal orientation of Mondrian's most pure work, but Rietveldt's design has a fluidity that much of Mondrian's work lacked. The rectangular panels seem to float in front of equally rectangular dark windows. All forms are balanced asymmetrically, and a portion of the flat roof seems to move out from the building toward the street. As we look at it, the building seems almost to be in the process of arranging itself. In fact, the interior spaces were designed to be flexible; sliding panels could be moved to accommodate the needs of the occupants. While it seems very modern even today, to really understand its impact in 1924, however, imagine the shocking contrast made by this building painted in white, gray, and primary colors in a neighborhood of nineteenth-century homes.

THE INTERNATIONAL STYLE

The Schröder House and De Stijl would eventually be included in a worldwide movement called the **International Style.** Other architects in Europe and the United States shared the Dutch artists' desire for a pure modern counterpart for the Machine Age—constructions that utilized a new language for the arts.

The **Bauhaus**, founded by Walter Gropius (see Chapter 11), was designed to be a home for this new language. Gropius's dictum that "the complete building is the final aim of the visual arts" was one of the central tenets of the movement, and his influential design for the new *Dessau Bauhaus* (19-7) epitomizes many of the qualities that would characterize the International Style for decades to come. Finished in 1926, it was the new home for the school after political changes made it impossible for the Bauhaus to remain in its first location.

The building was the antithesis of the heavily ornamented style taught in traditional architectural academies. Flat-roofed and made of modern



19-6 Gerrit Rietveldt, Schröder House, Utrecht, Netherlands, 1924.

materials (concrete, steel, and glass), it was free of any superfluous decoration. Boxlike and practical, all spaces were designed for efficient organization. It followed Gropius's directives for the new architecture in 1923:

We want a clear, organic architecture, whose inner logic will be radiant and naked, unencumbered by lying facades and trickeries; we want an architecture adapted to our world of machines . . . whose function is clearly recognizable in the relation to its form.



19-7 Walter Gropius, Bauhaus, Dessau, Germany, 1925–1926.

The building was supported by an outer skin of glass and steel, what would be known as a "glass curtain." Notice Gropius's handling of the corners of the building. Instead of the typical heavy stone piers, there was only a sharp edge formed by the meeting of transparent panes of glass. Light poured into the large, open classrooms. The glass-curtain walls also allowed those on the outside to see the activities inside, breaking the age-old tradition of separation between interior and exterior spaces. All aspects of the building were designed and built by instructors and students, from the lamps to the furniture in the dining rooms. Its integration of interior and exterior design became the new tradition for modern architects.

After the Bauhaus was finally closed by the Nazis (see box), Gropius and many of his instructors came to the United States and continued teaching and designing. Their influence on the training of young American artists and architects helped make Modern architecture and design the dominant style for

the rest of the twentieth century. One measure of their influence is that the Bauhaus building at Dessau seems like an ordinary building today.

LE CORBUSIER: MASTER OF THE "NEW SPIRIT" IN ARCHITECTURE

Le Corbusier's *Villa Savoye* (19-8), however, still seems radical more than a half-century after its construction. Built in 1931 as a weekend house in the suburbs of Paris, it has long since been seen as the embodiment of the International Style. Resting at the top of a hill supported by concrete columns, with horizontal windows providing views in all directions, it is the twentieth century's *Villa Rotonda* (14-24) or *Monticello* (10-38). Unlike Palladio or Jefferson, however, Le Corbusier utilized no Classical elements or historical references. An architectural



19-8 Le Corbusier, Villa Savoye, Poissy, Ile-De-France, France, 1929–1931.

purist, he believed that Modern buildings should be more rational and scientific than previous styles. According to him, a house was "a machine to be lived in."

In the Villa Savoye, the columns that support the building not only provide a fine view inside and on top but also a convenient place to park one's car. A pure, undecorated skin of windows and smooth stucco surround its inner frame. Inside, ramps lead through large, open, and well-lit rooms and up to a secluded roof garden—a pleasant idiosyncrasy of his buildings. Along with most of the buildings in the International Style, Le Corbusier's buildings have come to be seen as dehumanizing, but that was not their original intention. Like Gropius, Le Corbusier dreamed of an architecture that could create a better world. By utilizing and preaching a new international style, what he called the New Spirit, Le Corbusier hoped that old nationalist boundaries could be broken down, and a new world order devoted to humanitarian goals could be achieved. His "Plan for a Contemporary City for 3 Million Inhabitants" (10-41) was one of a lifetime's worth of projects designed to resolve the intransigent social problems of poverty, homelessness, and class divisions. Le Corbusier imagined such reforms could be achieved through an orderly and perfected architecture. Despite his extraordinarily creative mind (Gropius once said it would take an entire generation of architects to explore all of Le Corbusier's ideas), most of his projects were never built. In the twentieth century, however, this was no longer a hindrance to fame. Because he lived in an age of easily made reproductions, Le Corbusier's blueprints were circulated worldwide, and a younger generation of architects spread his plans and the International Style throughout the world by modifying his ideas and making them less radical.

FRANK LLOYD WRIGHT

Frank Lloyd Wright epitomized the American approach to modern architecture before World War II. Wright, who became the most famous American architect, designed modern buildings that have many similarities to the Bauhaus model but are based on profoundly different ideas. His motto—"Form follows function"—learned in his apprenticeship from the architect Louis Sullivan, remains a slogan of the Modern Art movement.

Wright was born in the beautiful hills of rural Wisconsin just after the end of the Civil War. He learned the lessons of nature, which he called "a wonderful teacher," on his uncle's farm. As a young architect in Chicago, the messages of his childhood were translated into an ideal he would later call "organic architecture": functional buildings designed to work with nature, built from the creative arrangement of simple forms.

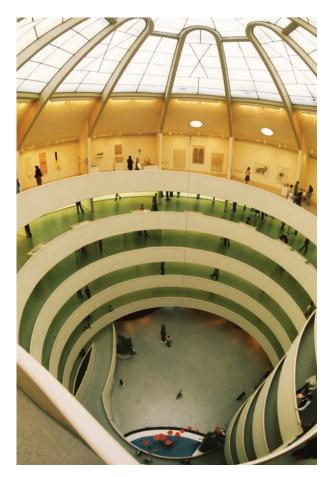
For his entire life, Wright refused to be associated with what he felt was the essentially European International Style. In 1932, Wright said of Le Corbusier: "I believe Le Corbusier [is] extremely valuable, especially as an enemy." Wright's Kaufman House (Fallingwater)—see drawing, plans, and finished building in Chapter 10—built in 1936, makes a striking comparison with the Villa Savoye. Both homes are designed as country retreats, but their underlying attitudes are quite different. The utter logic and machinelike quality of Le Corbusier's design is opposed by the free forms and natural materials favored by Wright. Wright's building is designed to blend into nature; in fact, it sits on a ledge where a waterfall actually passes under the house. Le Corbusier's villa stands on columns that distance it from nature; its boxlike form has nothing to do with its surroundings. While both architects used concrete to shape simple, geometric forms, Wright's open slabs reach out to nature, while Le Corbusier's box resembles a fortress.

However, both architects shared the modern aesthetic. They believed in the elimination of unnecessary ornament, in letting the function of the building determine its design. Neither approved of the use of historical references. Both believed interiors should be as open as possible. Above all, they were committed to the idea that architects should design every aspect of a building, from the overall plan to the furnishings within. One of the most beautiful results of this aesthetic is Wright's exploration of round shapes at his *Solomon R. Guggenheim Museum* in New York City (19-9, 19-10). In a building that is almost a modern sculpture itself, art lovers move smoothly and gradually along a spiral ramp from the top to the ground level without interruption.

Wright was the first American architect to have a truly international influence. While he probably never achieved his intention of being "not only . . . the greatest architect who has ever lived, but the greatest who will ever live," during the middle decades of the twentieth century, there were many in his field who believed he had.



19-9 Frank Lloyd Wright, Solomon R. Guggenheim Museum, New York, 1943–1959.



19-10 Frank Lloyd Wright, main rotunda of the Solomon R. Guggenheim Museum, New York, 1943–1959.

ABSTRACT ART IN AMERICA: O'KEEFFE

Georgia O'Keeffe was another American original. Like Wright, O'Keeffe was born in rural Wisconsin and first attracted attention in the early years of the twentieth century. In her old age, she also became a larger-than-life figure in the art world. She said she knew as a child that she wanted to be an artist, even though she had very little idea what that meant. In the early 1900s, however, most American women who wanted a career in art were expected to become teachers; higher ambitions were not considered practical or proper. After years devoted to the study of art, followed by teaching in public schools and colleges, she felt rather discouraged. As she wrote many years later,

One day I found myself saying to myself, "I can't live where I want to. I can't even say what I want to." I decided I was a very stupid fool not to at least paint as I want to.

She discovered a deep well of inspiration in the abstraction of nature, its creations, and its forces—her most dominant theme during a career that lasted nearly seven decades. *Two Calla Lilies on Pink* is a good example of her sensuous style of synthesizing natural forms (see 3-12).

Radiator Building—Night, New York (19-11) was painted in 1927, when she was living in New York



19-11 Georgia O'Keefe, *Radiator Building—Night, New York,* 1927. Oil on canvas, $48'' \times 30''$. The Carl van Vechten Gallery of Fine Arts, Fisk University, Nashville, Tennessee (Alfred Stieglitz Collection).

City. O'Keeffe focused on the unique experience of artificial light at night in the modern city—a manufactured world filled with unnatural experiences. The home of the American Radiator Company rises like a beacon at the center of the picture; the skyscraper's windows form a grid of whites and grays. Searchlights illuminate an undulating cloud of steam that rises from a rooftop; street lights glow like stars and float mysteriously.

Throughout her career, O'Keeffe followed a pattern that she established at its beginning: taking inspiration from the world around her and reworking it into a personal statement. Sometimes her pictures were quite literal; at other times they would become totally abstract. The simple purity of O'Keeffe at her most nonrepresentational is seen clearly in *Abstraction Blue* of 1927 (19-12). What once may have been

the interior of a flower is now a series of rounded forms. Arranged symmetrically, they are all brought together in a quiet balance that gives an impression of monumentality. With Abstraction Blue's sharp edges and blue palette, one might have expected it to seem harsh and cool, but O'Keeffe mitigates this sharpness with soft gradations of blue and pink. Such gradual blendings of color combined with crisp edges are hallmarks of her style. Her pictures are accessible to the general public in a way that is rare among the nonrepresentational artists of the twentieth century. Shortly after her death at the age of ninety-eight in 1985, a retrospective of her art in Manhattan drew enormous crowds and solidified O'Keeffe's reputation as one of the most important American artists of the century. As she predicted, when explaining why she made her flowers so big, "I will make even busy New Yorkers take the time to see what I see of flowers."



19-12 Georgia O'Keefe, *Abstraction Blue*, 1927. Oil on canvas, $40 \frac{1}{4}$ " \times 30". The Metropolitan Museum of Art, New York (acquired through the Helen Acheson Bequest).

19-13 Edward Weston, *Snag, Point Lobos*, 1930. Gelatin silver print. Center for Creative Photography, University of Arizona.

STRAIGHT PHOTOGRAPHY

When comparing the work of the painter, O'Keeffe, and the photographer, Edward Weston, it seems surprising that they were not close friends. His closely studied vegetables (7-14), sculptural and almost abstract, cannot fail to remind one of similar pictures by O'Keeffe. He also shared with O'Keeffe a love for the wide-open spaces of the American West. Born in Chicago, he visited California for the first time at the age of twenty and stayed virtually for his entire life.

Like many other artists discussed in this chapter, Weston attempted to capture the eternal, but he insisted on doing this "honestly." Disturbed by photographers who tried to imitate painters by using soft focus and other "trickery," he resolved in the 1920s "to present clearly my feeling for life with photographic beauty . . . without subterfuge or evasion." He thus became one of the fathers of *straight photography* (see Chapter 7).

Dismissing interesting accidents produced by rapid shooting, Weston believed photographers should decide on each image they took. Using a largeformat camera that allowed him to see exactly what was in the lens, he "previsualized" each image before pressing the shutter release. A time-consuming process, Weston would wait all day if necessary to reveal the "deepest moment of perception." His camera made negatives that were eight by ten inches, and all of his prints were contact prints, made directly from a negative without enlargement or reduction. This provided images of the utmost clarity and purity. These prints were also uncropped (printed "fullframe"), a tradition established by Weston and followed to this day by many photographers. For him, the need for any alteration to his images implied that he had failed.

Snag, Point Lobos (19-13) is ample proof that Weston's patience paid off handsomely. Point Lobos is a state park on the coast of California near Weston's home and one of his favorite sites. The vivid description of the textures on a piece of weathered wood could not be seen so clearly with any other photographic method. It fulfills Weston's ambition to show "the greater mystery of things revealed more clearly than the eyes can see." Photographed against a clear sky, the aged wood seems like an ancient monolith.



THE CENTER OF WESTERN ART SHIFTS

In the 1930s, storm clouds were gathering in Europe that were harbingers of its coming decline. The closing of the Bauhaus by Adolf Hitler's government in Germany was just one small part of his organized plan of censorship, repression, and terror (see box). After Hitler's armies began their attempt at world domination in the 1940s, Europe was no longer capable of providing a nurturing ground for advanced artists. While Picasso and Matisse would stay in France, many artists fled from Europe, looking for a place where they could pursue their art in freedom. Mondrian, Max Ernst, and Salvador Dalí were among the many artists who left Europe for America. They joined other important European artists like Marcel Duchamp, who had already emigrated to the United States before the war.

Their combined presence had a profound effect on American art, especially in New York City where most of them found a home. New York City became the world capital of art in the 1940s and 1950s, replacing Paris, which had been the center of Western art since the age of Louis XIV. The land of Norman Rockwell had been invaded by Modern art.

ART NEWS

The War Against Modern Art: Degenerate Art

s a young man, Adolf Hitler wanted a career as an artist. His student work was far from controversial or threatening. Most of his pictures were architectural drawings and pleasant, sentimental landscapes in watercolor. Unfortunately, when he applied for admission to an art academy in Austria, he was rejected and forced to abandon his dream.

As he rose to power in Germany, Hitler never forgot the insult. He would take his revenge on the art world and decide what was acceptable in art. The Bauhaus was one of the first schools affected by the rise of Nazism. A new Fascist city government appointed a new director, whose view of Bauhaus style was that it was "cosmopolitan rubbish." The school was closed by the government in 1933.

Hitler believed in an art that was elevated and classical, one that anyone could understand. According to him, Modern art was the expression of sick minds. So was modern music like jazz. Modern art was removed from the museums, and private collections were confiscated by the government. While some of these pictures were destroyed in bonfires, many would be sold to raise funds for the Nazi war machine. Artists like the Expressionists, who did not share his views, first lost their teaching positions and later were forbidden to even make any art. Some artists, like Ernst

Kirchner, committed suicide. Many were forced into exile. Outside of Germany, the Emergency Rescue Committee was created in Europe to assist fleeing artists, musicians, and writers.

To show the German people his vision of art, in 1937 Hitler opened The House of German Art in Berlin, a museum designed to replace modern art with "a 'German' art and an eternal art." Hitler's chief spokesman declared that the new museum was proof that "the Führer loves art." Along with German masters like Dürer and Holbein, the museum exhibited new works created to glorify the Aryan empire; all part of "a new and vigorous flowering of art."

Across the street, another exhibition opened at the Führer's direction—"Entarte Kunst" (Degenerate Art), 19-14. Its goal was to educate the people and to cleanse the nation of degenerate influences. More than six hundred works were in the show, which included some of the most important names in the history of Modern art. Among the 112 artists on exhibit were Kandinsky, Mondrian, Klee, Chagall, Ernst, Kollwitz, Nolde, and Kirchner. The works were hung all over the walls at many angles, with slurs like "Bolshevik,"

Entartete

Vom 11. November bis 31. Dezember
Verwaltung, Spitales der Schop

19-14 Degenerate Art Show poster, Hamburg, 1938, Germany.

ART NEWS

and "Jew" scrawled next to the pictures. Modern landscapes were described as "Nature as seen by sick minds."

Hitler declared that there were only two possible explanations for these modern artists. He said:

Either these "artists" really do see things in this way and believe in what they represent. Then one has only to ask how the defect in vision arose, and if it is hereditary, the Minister for the Interior will have to see to it that so ghastly a defect of vision shall not be allowed to perpetuate itself. Or if they do not believe in the reality of such impressions but seek on other grounds to burden the nation with this humbug, then it is a matter for a criminal court.

The Degenerate Art show toured Germany and Austria for four years and would be seen by more than three million people, probably more than any exhibition in history. Most visitors laughed at the works. Artists and art students went to see these masterpieces of twentieth-century art for what they believed was the last time and suffered in silence.

ABSTRACT EXPRESSIONISM: MODERN ART CREATED IN AMERICA

Willem de Kooning, born in Holland, came to this country as a young man. De Kooning's early paintings were portraits, influenced by Picasso but already with a dramatic command of line. Then, in the late 1940s, de Kooning began a series of black-and-white paintings that were totally original (19-15). Loose, expressive lines described very complicated and interlocked abstract spaces. It is not clear which shapes are coming forward and which are behind. This was intentional; like the Cubists, de Kooning did not want these pictures to have a conventional background and foreground. His mastery of a gestural, calligraphic line creates powerful rhythms all by itself.

These nonrepresentational, energetic pictures were some of the first of a new kind of painting that would become known as **Abstract Expressionism**. Like many art historical labels, it is a loosely defined one, describing art that combines the potent psychological content of Expressionism with an abandonment of any clear reference to the visual world.

Throughout his career, de Kooning would paint both pictures that referred to the visible world (like *Woman and Bicycle*, 1-41) and those that were more or less completely abstract. He, along with his fellow Abstract Expressionists, believed it was more impor-

tant to be an honest painter than to stick to a single-minded theory of art. If, while painting, his picture began to look like a woman, then why should he deny it? If it reminded him of looking out a door toward a river, why shouldn't he have the freedom to recognize it? Paintings like *Door to the River* (19-16) can be admired either as an imaginative interpretation of a scene or understood on a totally abstract level. The confident, wide, thick brushstrokes and harmony of the colors communicate on a direct emotional plane. The sense of a landscape is intuitive and not compulsory.

Pollock's Action Painting

There were two fathers of this new movement: de Kooning and an American painter, born in Wyoming, Jackson Pollock. Pollock was influenced by the Surrealist artists who came to New York during World War II. He was particularly inspired by the way they gained access to their unconscious through a method called "automatic picturemaking," where all marks were made instinctually, without planning or thought.

Pollock transformed this approach into a revolutionary and nonrepresentational way of painting that would be called his "drip technique" (see photo, 19-17). On a length of canvas rolled onto the floor of his studio, Pollock would instinctually drip long lines of paint with brushes and sticks. He would hover

over his canvas, sometimes stepping into it, moving constantly. While he was working, his picture would not really have a top or bottom. Not until he was finished would he determine the picture's final size (by cutting the canvas) or where its bottom was (by signing it). His lines were unique not only because of his technique, but also because they did not do what lines had always done in art—describe spaces or shapes. His lines were independent and active, each a lively experience.

The design of a drip painting was also original—an "all-over" picture. This meant that, unlike all previous paintings, in Pollock's work no one part or section dominated the others. No part could be called the subject. All over the canvas, everything was equal in impact. By looking at *Number 1, 1950 (Lavender Mist)* and a detail of it (19-18, 19-19), we can see that, whether it is seen at a distance or close up, Pollock's approach created an entirely new kind of space. Nets of lines laid one over another produce a sense of infinity. Looking at a huge Pollock painting is like looking up at a sky full of stars on a clear night.



19-15 Willem de Kooning, *Painting*, 1948. Enamel and oil on canvas, 42%" \times 56 \%". The Museum of Modern Art, New York (purchase).



19-16 Willem de Kooning, *Door to the River*, 1960. Oil on canvas, 80" × 70". Collection of Whitney Museum of American Art, New York (purchased with funds from the Friends of the Whitney Museum of American Art, 60.63).



19-17 Jackson Pollock at work, 1951. Photograph by Hans Namuth.

19-19 Detail of figure 19-18.





19-18 Jackson Pollock, *Number 1, 1950 (Lavender Mist),* 1950. Oil, enamel, and aluminum on canvas, $88'' \times 119'' \times 1\frac{1}{2}''$. © DACS. The National Gallery of Art, Washington, D.C. (Ailsa Mellon Bruce Fund).

Pollock is the artist most identified with the term *action painting* because of the energy in his new technique. His action paintings, according to witnesses, were done in fits of intense and often violent activity. He was known to spit at and burn parts of his pictures. Their great size was not a result of any artistic theory but rather Pollock's sense that he needed room to work in. Wall-sized, heroic pictures would become one of the identifying characteristics of Abstract Expressionism.

Jackson Pollock's unusual method of painting and lifestyle transformed him from an unknown to a celebrity. An art critic described Pollock as Picasso's heir, saying he had taken the old master's ideas and made them "speak with an eloquence and emphasis that Picasso himself never dreamed of." For the first time, Pollock was able to survive solely on the sale of his paintings. The paintings of de Kooning and other Abstract Expressionists began to sell, too. Before Pollock's acclaim in the 1950s, the Abstract Expressionists were largely a group of unknown artists living in low-rent apartments in lower Manhattan, barely surviving. As part of a conscious effort to recreate the exciting atmosphere of café life in Paris, they would meet in bars after painting all day and discuss art. Between drinks, they would offer each other consolation and camaraderie—so necessary for the essentially lonely act of making art. Sales were few and far between, but the news media got excited about Jackson Pollock. He was known as a wild man, a real cowboy; when he got drunk, he often was violent. With the attention of the art world and the media, Abstract Expressionism became the dominant style of art worldwide by the late 1950s.

While de Kooning and Pollock were the most influential of the Abstract Expressionists, other members of this group developed their own individual styles. The Abstract Expressionists did not have an all-encompassing style like earlier movements in art history. What they shared was a belief in individual freedom. This individualism is often said to be uniquely American. It may also be seen as a reaction to the totalitarian forces in Europe that led to the horrors of World War II. These artists did not want to share a manifesto, because they believed artists should operate freely.

Color-Field Painting

Mark Rothko was another member of the original group of Abstract Expressionists. Like Pollock, he explored automatic picture-making early in his

career; his paintings contained totemic or symbolic shapes produced from the unconscious. In the late 1940s, he generated a new kind of picture, where large areas of color were more dominant than any particular shape. This new way of painting would become known as **Color-Field Painting**.

Rothko had not abandoned his earlier interest in the unconscious. He was simply approaching it from a different direction, by exploring the psychological and spiritual effects of color. In pictures like *Green on Blue* (19-20), Rothko creates a living, breathing color field. He applied his colors in thin, transparent layers, one over another. The edges between the rectangular areas are not hard but soft, and they seem to shift, producing a sense of gentle movement.



19-20 Mark Rothko, *Green on Blue*, 1956. Oil on canvas, 89³/₄" × 63¹/₄". Collection of The University of Arizona Museum of Art, Tucson (gift of Edward J. Gallagher, Jr.) Acc. No. 1964.001.001

Many of Rothko's pictures are more than ten feet tall. He wanted viewers to be surrounded by his pictures. It was only on this scale, he felt, that his Color-Field paintings would come alive and affect the spirit of the viewer. He wrote: "I paint large pictures because I want to create a state of intimacy. A large picture is an immediate transaction: It takes you into it."

Teacher to the Next Generation

Hans Hofmann is known primarily as the teacher of the next generation of American Abstract Expressionists. His career in teaching began in his native Germany, and he also lived in Paris, where he witnessed the birth of Fauvism and Cubism. In 1932, he arrived in New York and began teaching. His reputation as a great teacher brought him many students who would become important artists and teachers themselves.

Hofmann believed in what he called "pure painting," which according to him was the only honest painting, "the true realism." What he meant by pure painting was art that would have no reference to the visible world, like his *Memoria in Aeternum* (19-21). According to Hofmann, there was more to nature than visual reality. In the Modern era, painting had moved beyond illusionism, which was only a cheap



19-21 Hans Hofmann, *Memoria in Aeternum*, 1962. Oil on canvas, $7' \times 6' \frac{1}{2}''$. The Museum of Modern Art, New York (gift of the artist).

trick. The activity and excitement on the surface of the painting were enough of a subject for any artist. He talked about "push, pull": how the addition of, say, a rectangle of color creates a whole new dynamic in a picture. It would push the other elements around, necessitating a balancing pull to bring the other parts of the picture into a sense of equilibrium. This push, pull balancing act was what artists, according to Hofmann, had been doing for centuries. It was only with a totally abstract art that the essence of painting could be revealed honestly.

Most of the second generation of Abstract Expressionists were fervent believers in Hofmann's ideas. They believed representational art was dead as fine art, and it should be left to the commercial illustrators. Abstract Expressionism, by the mid-1950s, was the most powerful force in Western art. Its next generation would build on the foundation its creators had built.

The New York School

Helen Frankenthaler was a student of Hans Hofmann and one of the leaders of the next generation (sometimes called *The New York School*). The turning point in her career came during a visit to Jackson Pollock's studio. She watched him at work, spreading his canvas on the floor, circling his picture, painting from every side. She later said, "It was as if I suddenly went to a foreign country but didn't know the language, . . . [I] was eager to live there . . . and master the language."

In 1952, she began to paint in a new way. She spread raw canvas on the floor and began pouring paint from coffee cans, letting it soak into the unprimed canvas. (Most painters prime their canvases, which means applying a coat of a special white paint, gesso, that seals the fabric.) Her colors stained the canvas, creating unusual effects. The result she called Mountains and Sea (19-22), a painting more than ten feet tall. Its title came from the colors that reminded her of the Nova Scotia coast she had just visited. Despite its title and great size, there is a sense of intimacy. Because of its soft, gradual transitions, it seems more like watercolor than an oil painting. Unlike "normal" oil paintings, where the paint is clearly on top of the surface, in Frankenthaler's the paint seeped into the canvas, becoming an integral part of it. While she remembers that many who saw her first canvas thought it looked like a "large paint rag," she was convinced she had discovered a new way of working that was rich in possibilities.

She observed that accidents were bound to happen in both her and Pollock's method. Rather than trying to avoid them, she found them to be an important creative stimulus that opened up important new questions for artists. Is all life planned? Doesn't it take true creativity to deal with accidental circumstances, in life and in art? Perhaps an accident would lead her to ideas she would have never thought of on her own. This concept, called happy accidents, continues to be popular among contemporary artists. One should not think, however, that Frankenthaler made no attempt to control her paintings. On the contrary, she spent a great deal of time working with her poured paint. She would manipulate the wet areas with brushes, or by blotting. Sometimes she would pour enough paint to create puddles of color—all to create a variety of textures. These different textures gave her work an unusual sense of space, a space that was neither Renaissance nor Cubist.

As mentioned in Chapter 5, Frankenthaler later shifted from oils to the new acrylic polymer paint (see 5-9). This eliminated a faint oily stain that had surrounded each color area in her early work. It also permitted her to experiment with flatter and purer color fields versus the relatively gestural *Mountains and Sea*. These simpler fields would be very influential on later Color-Field painters and the Minimalists of the 1960s and 1970s (see Chapter 20). No matter the medium, her work has a calm, sensuous beauty that sets it apart from the generally anxious works of Abstract Expressionism.



19-22 Helen Frankenthaler, *Mountains and Sea*, 1952. Oil on canvas, 7' 25/8" × 9' 91/4". Private Collection

Nonrepresentational Sculpture

Few artists have created a whole new form of art. Most have made their contributions by innovating in traditional forms. In the twentieth century, however, two new forms were invented by artists: Picasso's invention was **collage**, and Alexander Calder's was **kinetic sculpture**, or the *mobile*.

Sculpting was a family tradition for the Calders. His father and grandfather were both successful in the field, his grandfather being best known for the statue of William Penn atop Philadelphia's City Hall. Alexander's first sculptures were not much more than drawings with wire (2–5), but they have a sense of fun and playfulness that was endearing and helped make him one of the most popular artists in the United States and Europe. His miniature circus "performances," with figures made of wire and corks that swallowed knives and walked a tightrope, were the talk of Paris.

His **mobiles**, discussed in Chapter 9, are the sculptures with which he is usually identified. While the mobiles were quite small initially, Calder later in his career built mobiles on an enormous scale in

response to public commissions. For example, his mobile designed in the 1970s for the central court of the National Gallery of Art in Washington, D.C. (9-7), spans more than six feet and weighs more than nine hundred pounds. But its gentle movements are able to bring life to the stark, empty space it floats in.

He also made large sculptures he called *stabiles*, like *La Grande Vitesse* (19-23), which can be seen in public spaces all over the United States. Despite its huge size (fifty-five feet tall) and weight (forty-two tons), *Vitesse* is not overwhelming, but cheerful and lighthearted. Calder's pleasure in making such works is contagious. Their names rarely mean much; Calder said, "I make the things without any references, but it's necessary to have names, just like cars have license plates." Because of the prevalence of his public work, Calder probably did more to make nonrepresentational art acceptable to the general public than any other artist. The mobile, like Picasso's collage, has become one of the standard art forms. Today, both are even practiced by children in their arts and crafts classes.

The Abstract Expressionist movement in American art during the late 1940s and early 1950s would find its expression in sculpture in the work of David



19-23 Alexander Calder, *La Grande Vitesse*, 1969. Painted steel plate, 55' high. Calder Plaza, Vandenberg Center, Grand Rapids, Michigan.

Smith. He began his artistic career as a painter and was friendly with all of the leading Abstract Expressionists in New York. He shared many of their concerns, especially those of eliminating artificial constraints to artistic freedom and the necessity for an artwork to evolve as it is being made. Smith eventually developed a totally abstract art based on manipulating large geometric solids (see 3–3, 9–22). One of the wonders of Smith's work is how tons of metal are treated lyrically rather than ponderously. His skill as a welder helped him create sculptures that demonstrated that steel can be as flexible a material as the more traditional bronze, stone, and wood.

Mark di Suvero is another sculptor who was inspired by the Abstract Expressionist movement. He has described his work as "painting in three dimensions." If one compares his *Hankchampion* (19-24) to the painting of Franz Kline's *New York*, *New York* (2-4), it is easy to see the connection. Di Suvero's heavy wooden forms seem gestural and intuitively placed. The sculptor used found materials like Louise Nevelson (see Chapter 9), but in his case they were abandoned beams from demolished buildings. Di Suvero left the beams rough and unpolished, wrestled them into position, and connected them with thick bolts and chains.

Not long after he finished this sculpture in 1960, di Suvero was paralyzed when he was pinned under an elevator in a work-related accident. He was told he might be confined to a wheelchair for the rest of his life. Rather than learning to be satisfied with making small sculptures at a table, he become skilled at handling welding torches, a crane, and a cherrypicker. With these tools, he was able not only to move huge pieces of steel in place, but to bend them as well. This allowed him to make work on an even larger scale than before his accident. He also learned how to walk again in just two years. Today, he continues to work on a monumental scale (often thirty feet tall). His outdoor sculptures can be found all around the world, and he is a member of the crane operator's union.

ARCHITECTURE: THE GLASS BOX

In the twentieth century, modern architects explored the use of glass in ways that would have stunned architects of the past. As a building material, glass has quite different aesthetic possibilities than the traditional media of stone, earth, and metal. Because glass



19-24 Mark di Suvero, *Hankchampion*, 1960. Wood and chains, overall: $80'' \times 151'' \times 112''$. Whitney Museum of American Art, New York. Gift of Mr. and Mrs. Robert C. Scull 73.85a-i. Courtesy of Mark di Suvero and Spacetime

is both transparent and reflective, the standard division between inside and outside is challenged by a building with glass walls. This quality was explored by the American architect Philip Johnson when he built himself an all-glass house in the late 1940s (19-25). Except for a central brick core that houses the bathroom, the whole interior space is open, without walls or room dividers. All of the exterior walls are made of glass (although there are built-in shades to be used if desired), so the experience is one of living in the midst of nature, weather, and the trees that surround the site.

The experience within the glass house is far from sleeping under the stars. It retains a building's traditional role of shelter, and its design puts considerable psychological distance between the dweller and nature. Because of Johnson's strict adherence to the tenets of International Style, every aspect of its interior and exterior is integrated, logical, and civilized. The building's purity of design and use of modern materials provide a formal, intellectual vantage point from which to contemplate nature.

For obvious reasons of privacy, as well as expense, solid walls of glass have been more popular for commercial rather than domestic architecture. We associate glass walls with modern office buildings, towers where glass covers a skeleton of steel. Philip Johnson, during his long and distinguished career,



19-25 Philip Johnson, Glass House, New Canaan, Connecticut, 1949.

has designed many fine examples of these goliaths of the International Style, perhaps none better than the *Seagram Building* (10–30), a collaboration with his mentor, Mies van der Rohe (a former director of the Bauhaus). In the 1950s, 1960s, and 1970s, the International Style of architecture dominated large-scale public and corporate architecture around the world, putting an enduring stamp on urban life. Its orderly, disciplined forms are no longer seen as controversial but, in fact, as neutral and nonpartisan. A glass box lacks political or social overtones. Its absence of ornament was also a plus because, as even Johnson admitted in later years, it made building a skyscraper much cheaper.



ORGANIC ABSTRACTION

Nonrepresentation has been pursued in two general directions: the geometric and the organic (see Chapter 2). Johnson's Glass House is a collection of pure right angles, while Buckminster Fuller's geodesic dome (2-9) is a hemisphere, and David Smith's sculptures juggle cubes and cylinders. Those who make geometric works are often interested in evoking pure, transcendent existence, a kind of refined Neoclassical abstraction. Organic abstraction, as in Henry Moore's *Sheep Piece* (2-14), tends to be less cerebral and more spiritual, evocative of natural forces or living things. It could be called a kind of Romantic abstraction.

In the first half of the twentieth century, the highly geometric buildings of Le Corbusier epitomized the beliefs of the International Style and the glorification of the machine. No wonder that the architectural community was stunned by what appeared to be a startling reversal by one of the founding fathers of the International Style in 1950. Le Corbusier's *Notre Dame du Haut* (19-26), a small chapel in Ronchamp, France, seems the polar opposite of his earlier buildings, meant to foster a marriage of art and technology and nearer to Moore's sensual sculpture. In the organic, flowing Notre

19-26 Le Corbusier, Notre Dame du Haut, Ronchamp, France, 1950–1955.

Dame du Haut, right angles have been replaced by soft curves, rational order with intuitive placement. There is no clear glass curtain filling an interior with even light; instead, small windows with colored glass are placed in deep cuts in the heavy concrete walls (interior, 19-27).

Le Corbusier had actually given an earlier warning of his change of heart. In 1936, disappointed with the lack of imagination among fellow architects whom he believed were eager only to refine his ideas rather than to go beyond them, he wrote to a group of young architectural students:

How are we to enrich our creative powers? Not by subscribing to architectural reviews, but by undertaking voyages of discovery into the inexhaustible domain of Nature!

Le Corbusier's chapel is more like a sculpture than a building. It is placed on a hill that looks out onto a river, a site with a long religious history, from the early Christians to pre-Roman pagans. As if challenging less daring followers of the International Style, Le Corbusier exploits the flexibility of concrete with great imagination. The walls are curving, tilted forms that lean toward the center. The roof, shaped like the headdress of a French nun's habit, floats above the outer walls, perched on small columns. It is a building of many original spaces, with a dark, bare inner chapel, as well as an open-air one. An absolutely unique work of architecture, it is extraordinarily free of historical references. Concrete has rarely seemed so sensual or unfettered. Le Corbusier's lesson is that in the hands of creative people, abstract and nonrepresentational art has no boundaries.

THE CHALLENGE OF NONREPRESENTATIONAL ART

Nonrepresentational art has been in existence for more than seventy-five years, the logical development of changes in art during the 1800s. Many of the first totally abstract canvases are antiques; their paint is cracking from the passage of time. Yet abstract art is still often seen as weird or strange.

Most viewers feel more comfortable with artworks that refer to the world they know; many prefer art that tells a story. Nonrepresentational art can do these things, but not in a conventional way. Each work is an expression of the ideals, personality, and mood of the artist. The world they refer to is an inner one. We have seen many artists, all working abstractly, create very different artworks. Some seem passionate and violent, some absolutely logical and calm. If you look closely, there are significant differences even between two emotional Abstract Expressionist artists.

By looking even more closely, one can imagine a story. Each element—each line, shape, volume, and color—is a separate character having its own weight and impact. The tale is one of the relationship of these elements. Who will dominate? Which is weak? How do they connect? Will they ever reconcile their differences? Nonrepresentational artwork is a veritable soap opera. Approach it with an open mind and look carefully; totally abstract paintings and sculptures have scenarios without limit.



19-27 Le Corbusier, interior of Notre Dame du Haut.

A Storm of Images: Art in the Contemporary World

y the 1950s, New York City was the magnet that drew young, ambitious artists from all over the world, like Paris had a century before. Just as the United States came to be the foremost power in world affairs after World War II, so did America's artists and cultural institutions come to dominate the art world. The School of Abstract Expressionism had dethroned the School of Paris. For the following half-century, artists of every nationality could be found living and working in New York.

Mark Tansey's Triumph of the New York School (20-1) depicts in tongue-in-cheek manner the surrender of the School of Paris on a smoldering battlefield. On the left, dressed in World War I uniforms are portraits of leading figures of the Modern movement. Picasso in

	PERIOD	HISTORICAL EVENTS	
1945-1960	Abstract Expressionism The New York School The International Style	Jean-Paul Sartre and others develop Existentialism 1940s Churchill describes Soviet domination of Eastern Europe as an "iron curtain" 1946 India and Pakistan become independent states 1947	People's Republic of China united under communist leader Mao Zedong 1949 Korean War begins 1950 New York becomes center of world art 1950s
1960-1980	Pop Art and Happenings Minimalism Earth Art Performance art Video art Superrealism Feminist art	Space race between U.S.S.R. and the United States 1950s–1960s Civil Rights March on Washington 1963 Assassination of President Kennedy 1963 United States fights Vietnam War 1964–1973	First Earth Day 1970 Watergate, President Nixon's resignation 1974 Second wave feminism in the United States 1960s–1970s
1980-present	New Image Neo-Expressionism Post-Modern art and architecture Installation art Digital art	Last remaining European colonies in Africa receive independence 1980s Rise of Islamic fundamentalism 1980s Iran-Iraq war 1980–1990 AIDS first identified 1981 Collapse of Soviet Empire 1991 Nelson Mandela becomes President of South Africa 1994	Fourth World Conference on Women, Beijing 1995 Introduction of Euro 1999 Attacks on World Trade Center and Pentagon 2001 Growing concern about Global Warming 2000s United States war with Iraq begins

World Wide Web 1994



20-1 Mark Tansey, *Triumph of the New York School*, 1984. Oil on canvas, 74" × 20". Whitney Museum of Art, New York.

ART

Philip Johnson, Glass House 1949



Franz Kline, New York, New York 1953



Knoll Showroom in San Francisco 1957



Alberto Giacometti, Walking Man II 1960



A A

Andy Warhol, Gold Marilyn Monroe 1962





SITE, Best Products Showroom 1975



Judy Chicago, Dinner Party 1979

Sandy Skogland, Radioactive Cats 1980



P

Maya Lin, Vietnam Veterans Memorial 1981–1983

John Lasseter, et al. Luxo Jr. 1986



Nam June Paik, *TV* Buddha 1974

Christo and Jeanne Claude, *The Gates* 2005





Zaha Hadid, Sheikh Zayed Bridge

a furry aviator's coat stares defiantly, while, to the left of him, Matisse turns his head away. The Americans are dressed in World War II khakis, represented at the signing table by Clement Greenberg, a critic who was their chief supporter. Among the American soldiers are Willem de Kooning and Jackson Pollock.

Born as a movement to open up new territories for art, Abstract Expressionism was quickly trumpeted by critics like Greenberg as the only way to make serious art. In a remarkably short time, academics also embraced the movement and codified it. For the next twenty years, art schools and universities trained students in working abstractly. Drawing realistically was only for beginners, merely a step toward more important concerns. As might be expected, younger artists soon began to feel straitjacketed by the new dogma of Abstract Expressionism.

ALTERNATIVES TO ABSTRACT EXPRESSIONISM: RAUSCHENBERG AND JOHNS

In 1954, Robert Rauschenberg came to New York and met a shy, young artist from rural South Carolina, Jasper Johns. Rauschenberg had grown up in Texas, in a bustling port surrounded by oil refineries, far from the intellectual centers of Paris or New York City. He and Johns became close friends and rented studios in the same building in downtown Manhattan. Like Picasso and Braque during their Analytical Cubist period, for the next few years the two young men worked feverishly and saw each other every day, engaging in an intense dialogue on the nature of art and life. In New York City, the young artists joined in the camaraderie of Pollock, de Kooning, and others. Rauschenberg later said he learned more from drinking with these artists in the taverns of Manhattan than from any of the art schools he attended. But Rauschenberg also witnessed the chilling effect Abstract Expressionism was having on younger artists. Rauschenberg thought that the complete exclusion of our daily visual experience of the world was too high a price to pay for what was said to be a purer, more honest art. He wondered how to get the real world back into painting without totally abandoning the power or achievement of Abstract Expressionism.

Rauschenberg proposed that "a picture is more like the real world when it's made out of the real world" and began the reintroduction of everyday objects as Picasso had, by using the medium of collage, or what Rauschenberg called "**combines.**" In *Bed* (20-2), he pulled art and life together by using a bed as his canvas. Across the pillow and sheets and on to the nice quilt, he applied the great colorful gestures and dripping paint of Abstract Expressionism. Despite his use of ordinary materials, the result



20-2 Robert Rauschenberg, *Bed*, 1955, Combine painting: oil and pencil on pillow, quilt, and sheet on wood supports, $6'\ 3\frac{1}{4}'' \times 31\frac{1}{2}'' \times 8''$ (191.1 cm \times 80 cm \times 20.3 cm). The Museum of Modern Art, New York (Gift of Leo Castelli in honor of Alfred H. Barr, Jr.).

is a shocking combination for anyone raised to keep one's bed clean and crisply made. It is also an unforgettable and powerful image.

Jasper Johns's work, like his personality, was more restrained than Rauschenberg's, but it also challenged the basic premises of Abstract Expressionism. What interested Johns were "things the mind already knows," subjects that were instantly recognizable. For example, his Flag (20-3) was part of a series of more than twenty-five paintings and many drawings and prints using the same subject. Johns would vary size, number, color, and materials, but the essentially flat flag would be the same in each. Most flags were built by painting thickly over a collage of newspapers, resulting in a very textured surface. The flag paintings seemed to follow the rules of Abstract Expressionism and to slyly undermine them at the same time. Like a typical Abstract Expressionist picture, Johns's images were absolutely flat and nonillusionistic and covered with lively, gestural brushstrokes. But they also had subjects; they were unquestionably, instantly recognizable as flags.

In direct opposition to the romantic search for inner truth found in the action paintings of Pollock and de Kooning, Johns's flag paintings were impersonal. He explains that he chose flags precisely because they are "things which are seen and not looked at, not examined." By using them in atypical ways, Johns is encouraging the viewer to go beyond the conventional reading of flags to see them freshly. He warns of the tendency we all have of thinking we know at one glance what we see. One should be open to new ways of understanding or new uses of ordinary things. His message is reminiscent of René Magritte's *The Treachery of Images* (18–35), a surrealist work in which the illustration of a pipe is subtitled with a message that it is not a pipe.

Done at the peak of Abstract Expressionism's dominance in the late 1950s and early 1960s, Rauschenberg and Johns's work shocked many artists and critics. They reopened the visual world and legitimized borrowing objects and symbols from popular culture. By repeating familiar symbols in lengthy series, Johns had also discarded one of the oldest tests of an artwork's value, one particularly important to the Abstract Expressionists—originality or uniqueness. That, along with the cool tone of Johns's works, appealed to a considerable group of artists who would focus more directly on common household objects and the products of the booming postwar American economy. Their works have become known as **Pop Art.**



20-3 Jasper Johns, *Flag*, 1954–1955. Encaustic, oil, and collage on fabric mounted on plywood, $42\frac{1}{4}" \times 60\frac{5}{8}"$. The Museum of Modern Art, New York (gift of Philip Johnson in honor of Alfred H. Barr, Jr.). Art © Jasper Johns/Licensed by VAGA, New York, NY

POP ART

The most famous and influential of the Pop artists was Andy Warhol. His early paintings of Campbell's soup cans and cardboard sculptures of Brillo boxes announced that no kind of subject matter was more important than any other. A six-foot canvas devoted to a can of soup seemed to mock the central precepts of Abstract Expressionism, still the dominant force in the art world. When Pollock and Rothko had worked on a large scale, they were announcing that their inner searches and new approaches were important. Few could question the powerful and heroic impact they had. Warhol reminded viewers that anything made large will have a dramatic effect, even a soup can.

Following the success of his first works, Warhol began producing images of celebrities that implied their connection to his images of packaged products. Multiple images of Elvis Presley, Jacqueline Kennedy, and Marilyn Monroe (20-4) were given the same treatment as Brillo and Coca-Cola. Even the *Mona Lisa* has become a glamorous commercial product according to Warhol (see Chapter 1). While Jasper Johns's cool attitude seemed revolutionary just a few years earlier, Johns had still applied gestural brushstrokes almost lovingly to his flags and targets. Warhol's approach was more than cool, even neutral. Warhol used photographically created silk-screens of his subjects and printed them directly onto his canvases in order to achieve a more mechanical look.



20-4 Andy Warhol, *Gold Marilyn Monroe*, 1962. Synthetic polymer paint, silkscreened, and oil on canvas, $6' 11\frac{1}{2}" \times 57"$. The Museum of Modern Art, New York (gift of Philip Johnson).

He later said: "I want to be a machine. . . . I think everybody should be a machine." His large studio in New York City came to be known, appropriately, as "the Factory." Assistants were reported to be producing his pictures.

Warhol became a celebrity. The Factory was filled every night with famous people and those seeking fame. The artist generally remained silent but listened to conversations and drew inspiration from them. After being shown a dramatic headline and gruesome front-page photograph of a horrible airplane crash, Warhol began his Disasters series. Gory automobile wrecks and racist beatings were reproduced several times on single-color canvases. In Orange Disaster (20-5), a dramatic photograph of the death chamber in a prison is repeated fifteen times. Alone, the electric chair and the small sign that calls for "silence" could move the viewer, but multiplied it loses its effect. The Disasters series illustrates the numbing effect that the daily storm of images has on us. When seen over and over again, even the most shocking pictures lose their impact. The Warhol canvases of the 1960s that treat celebrities, tragedies, famous paintings, and products as the same thing recreate the daily experience of watching television news. All are equivalent in importance, each given its few minutes of air time.

By focusing on the things we see every day, Pop Art was following the mandate of Robert Rauschenberg and closing the gap between art and our everyday experience of life. Claes Oldenburg went one step further and called for an art "that does something else than sit on its ass in a museum." He was a founder of Happenings, an attempt to use "real" materials and locations as art-theatrical events intended to break down the distance between art and audience, to become, as one artist said, an "all-encompassing art experience." In Store Days, for example, Oldenburg rented an abandoned storefront in New York City and filled it with life-size plaster reproductions of hamburgers, cakes, dresses, hardware, and other standard merchandise. Each object was loosely painted in bright colors with drips run-



20-5 Andy Warhol, *Orange Disaster*, 1963. Acrylic and silkscreen enamel on canvas, 106" × 81½". Solomon R. Guggenheim Museum, New York (gift, Harry N. Abrams Family Collection, 1974).

ning over them, a parody of action painting. When the audience entered, they were encouraged to behave like customers. When a sculpture was purchased, in contrast with the custom in fine art galleries, the buyer was permitted to take the object home immediately. Oldenburg replaced sold items from his studio in the back, which served as a storeroom.

Store Days was an examination of the relationship between art and money, an increasing concern among many American artists after World War II. As the American art market gained prominence, art seemed to be becoming more and more a commodity like stocks or precious metals. For the artists who achieved success in the 1950s, the struggle for acceptance, the years spent trying to make ends meet, was part of what gave an artist integrity. They felt that money and early success endangered the honesty and independence of any artist. Not surprisingly, Andy Warhol did not share the older artists' views. He did not find financial rewards disturbing and said "being good in business is the most fascinating kind of art."

Shortly after *Store Days*, Oldenburg's objects began to grow larger in scale. In his one-man exhi-



20-7 Claes Oldenburg, *Clothespin*, Philadelphia, 1976. Steel, 45'.



20-6 Claes Oldenburg, Soft Toilet, 1966. Vinyl, plexiglass, and kapok, on painted wood base, 57 ½6" × 27 ½6" × 28 ½6". Whitney Museum of American Art, New York. 50th Anniversary Gift of Mr. and Mrs. Victor W. Ganz 79.83a-b. Photograph by Jerry L. Thompson. Courtesy Oldenburg van Bruggen Foundation

bition of 1962, the small plaster hamburgers had expanded to soft-cloth ones four feet tall. The gallery was filled with enormous ice cream cones and slices of cakes. Viewers were treated to an Alice in Wonderland experience, as if they had shrunk to miniature size. By enlarging the things we see every day to gigantic dimensions, Oldenburg altered their reality and made them strangers to us. This allowed the viewer to examine them freshly, as if seeing them for the first time. Another way to shatter conventional seeing was by changing the materials of commonplace objects. In Soft Toilet (20-6), the artist substitutes stuffed vinyl for porcelain, and now the familiar bathroom item collapses as if it is fatigued. By making it soft, the toilet is humanized—one can even move its parts around and reshape it.

By 1965, Oldenburg had increased the scale of his projects to monumental. At first these were simply sketches of fantasies, but eventually he prepared formal architectural proposals and submitted them to various public and private institutions. In 1967, for example, he proposed to replace the Washington Monument with mammoth scissors that would open and close. Oldenburg has even been successful in realizing some of his monumental dreams. A forty-five-foot clothespin now graces a city square in Philadelphia (20-7), and a nearly one-hundred-foot-tall baseball bat is in Chicago.

VENTURI: POP ARCHITECTURE

Just as Abstract Expressionism became the standard form of painting and sculpture in the postwar years, the **International Style** dominated architecture. The buildings and theories of Gropius, Le Corbusier, and Philip Johnson (see Chapter 19), which called for pure, logical designs and prohibited unnecessary ornament or decoration, were the preeminent models for most serious architects around the world. Mies van der Rohe, chief architect of the *Seagram Building* (10–33) and a director of the Bauhaus, spoke for his generation of architects when he said, "Less is more."

Robert Venturi's response, however, was, "Less is a bore." The ideology of the International Style, according to Venturi, was a failure because it ignored the local culture of the locations where its buildings stood. No building could be successful that ignored the interests of the clients and the surrounding architecture. Buildings like the *Villa Savoye* (19-9) were more like alien structures than homes. They spoke a language that no one except sophisticated architectural scholars could understand and had a destructive effect on their environments.

Like the Pop Artists, Venturi felt architects should embrace popular styles of architecture, finding ways to utilize what he called "honky-tonk elements" that spoke in a language anyone could understand. Venturi put his ideas into practice in a design for a firehouse in Columbus, Indiana (20-8). Although the simplicity of its form is certainly more reminiscent of the International Style than a Gothic cathedral, several aspects of the building were considered a kind of heresy at the time. Venturi used a variety of windows with different sizes and designs, depending on the needs of the occupants rather than any geometric rules. A loud contrast between glossy white and red brick creates an irregular, not uniform, design. At the top of a seemingly functionless tower (it actually is used for drying hoses), he placed an equally loud sign that announced in bold graphics "FIRE STATION 4" to the public.

Venturi felt strongly that the International Style made a mistake when it rejected the past. The public service nature of his *Fire Station #4* is easily understood because its tower is connected to clock towers and church steeples of the past. It fits into its neighborhood because it is a brick building with a flat front and ordinary glass-windowed garage doors. The front is really a thin façade, an approach Venturi called "the decorated shed . . . a modest building with a big sign," used by supermarkets, department stores, and other commercial buildings all over the country. So unlike the metal-and-glass skyscraper, the Seagram Building, *Fire Station #4* is a truly American building designed to hold its own and live



20-8 Robert Venturi (Venturi and Rauch), *Fire Station #4*, Columbus, Indiana, 1965–1967.

with the billboards and gas stations found along any main street or highway. It has what Venturi called the "messy vitality" that the International Style had attempted to eliminate.

THE END OF ART: MINIMALISM

Pop Art was not the only alternative to Abstract Expressionism advanced in the 1960s. A group of serious, intellectual artists disgusted with the emotional outpourings of the Abstract Expressionists and the vulgarity of Pop Art began to make high-minded and refined art known as Minimalism. Minimalist art is art stripped down to the essentials, or as one artist said: "what you see is what you see." It is paintings and sculptures that are self-sufficient and have no subject matter, content, or meaning beyond their presence as objects in space. Lauded by some as a return to purity and high ideals, others called Minimalism the end of art. What was occurring was a replay of a battle that we have seen before: the battle among Romanticism, Realism, and Classicism, now in the arena of nonrepresentational and Pop Art. On one side, once again, were the defenders of emotions and expressiveness, on another, ordinary life, and on the third, purity and logic.

Donald Judd was one of the foremost creators and theorists of Minimalism. As an art critic in New York City, the Missouri-born Judd became concerned that art made it difficult to perceive reality. It bothered him that, while contemplating works of art, viewers are inevitably drawn into illusions, emotions not their own, and references to the past. The only way to reconnect the viewer with reality, Judd felt, was to produce works of art with no expressive techniques, free of associations, that could be seen to be simply what they were—plain and honest "matters of fact":

I wanted work that didn't involve incredible assumptions about everything. I couldn't begin to think about the order of the universe, or, the nature of American society.

Beginning in 1962, Judd made sculptures that were controlled and completely logical, designed to cleanse viewers of whatever concerns or preconceptions they brought into the gallery and allowing them to focus on the situation the artist had created there.

Untitled (20-9) is a good example of how Judd resolved his interest in a direct, honest work of art. It is made of ten virtually identical boxes constructed from stainless steel and Plexiglas attached to a wall

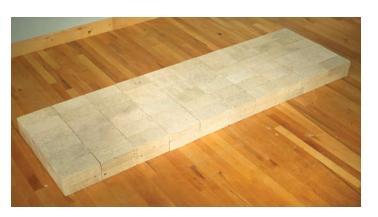


20-9 Donald Judd, *Untitled*, 1967. Stainless steel and Plexiglas, 10 units $9\frac{1}{8}$ " \times 40" \times 30" each, approximately 16 feet tall overall. Modern Art Museum of Fort Worth. Museum Purchase. The Benjamin J. Tillar Memorial Trust. Art © Judd Foundation. Licensed by VAGA, New York, NY

with even spacing. Because it is internally logical, it is relatively unaffected by what surrounds it. To eliminate any sign of the human hand (which might evoke emotions), Judd had his sculptures manufactured in factories, based on his drawings. Industrial fabrication ensured that his sculptures were also well constructed and as perfect a recreation of his concepts as possible. His boxes were open at two sides, with Plexiglas permitting light to enter so no aspect of their structure was hidden or mysterious. Because *Untitled* contains no allusions or illusions, viewers can focus on what they are truly experiencing. They become aware of being in a unique kind of situation—what

Judd would call "art space," an isolated place separated from the commotion of their everyday experience. In such a space, viewers realize the limits of their vision. Although you know logically that each box is the same, as you slowly pass by the work in the gallery, your changing spatial relationships alter its appearance moment by moment. This is what Judd would call a true, unadulterated art experience.

Minimalism appeared to be the final chapter in the refining of purity and truth in the visual arts, a search with a long history, from Ancient Greece to Mondrian. Art had been reduced to one simple, essential experience—the relationship between object and viewer. Yet in Modern Art's long history of radical changes, probably no other movement opened such a wide chasm between the artist and the ordinary



20-10 Carl Andre, Equivalent VIII, 1966. View of installation, Tate Gallery, London. Art © Carl Andre/Licensed by VAGA, New York, NY

viewer. Shell-shocked observers were further startled when one Minimalist artist, Carl Andre, exhibited a pile of 120 bricks called *Equivalent VIII* (20-10). The ordinary, mass-produced bricks were neatly arranged, two high, in a rectangle on the gallery floor. In such artwork the conceptual background—the artist's ideas about what art should be—was far more important than any visual attribute. But where would artists go from here, if anywhere?

EXPANDING MINIMALISM

Although Minimalist artists like Judd and Andre continue working within their narrowly devised confines, since 1970 the word *Minimalist* has been enlarged to include a much wider variety of art forms than Judd and Andre would accept. The term is generally used today to refer to any work of art that is refined, simple, and abstract with no references to any subject.

For example, the sculptures of Eva Hesse are described as being fundamentally Minimalist, even though they are much more evocative than Andre's 120 bricks. For example, the forms seen in *Repetition 19, III* (20-11) are geometric and nearly as repetitive as a Judd sculpture, but because Hesse used fiberglass, a more flexible material, to make them, they take on a more personal and evocative quality. The



20-11 Eva Hesse, *Repetition 19, III*, 1968. Nineteen tubular fiberglass units, 19" to $20\frac{1}{4}$ " high \times 11" to $12\frac{3}{4}$ " diameter. The Museum of Modern Art, New York (gift of Charles and Anita Blatt). © Estate of Eva Hesse, and Hauser & Wirth, Zürich/London.

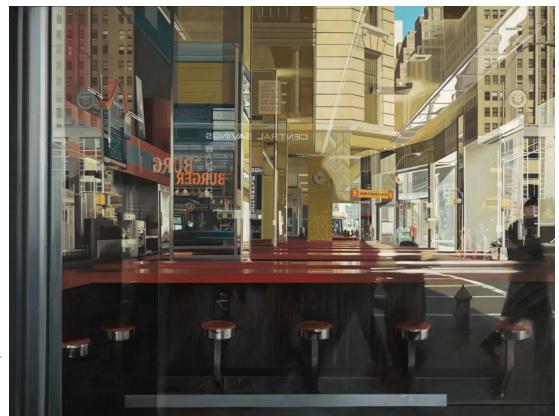
translucent, pale, amber-colored shapes in *Repetition* 19, III bend and sag in a naturalistic way. One can see little bubbles in them. While the forms begin as essentially similar, each form becomes unique as it hardens, since fiberglass dries unpredictably. Placed closely together, the columns seem like alien beings interacting. By constructing geometric forms out of materials like hoses, latex rubber, or cord wrapped in fiberglass, Hesse brought a more textured and suggestive aspect to Minimalism. She also helped bridge the gap between crafts and fine arts, laying the groundwork for a more serious evaluation of crafts like ceramics and fibers in the 1970s.

RETURN OF REPRESENTATION: SUPERREALISM

Until Pop Art, for a century the predominant trend in Western art had been away from literal representation toward abstraction. In a related development in the late 1960s, many artists trained as Abstract Expressionists betrayed their teachers with a 180-degree turn toward realism. **Superrealism** (or **photorealism**) was a movement that recreated in two dimensions the look of photographs and in three dimensions used casting to achieve the utmost fidelity to reality. Like the Realists of the nineteenth century, most of the Superrealists avoided drama and concentrated on ordinary life.

At first look, Superrealism appears to be the polar opposite of Minimalism. Richard Estes's Central Savings (20-12) is an impressive demonstration of the painter's technical skill. Rather than a flat, nonillusionistic canvas, one sees depicted in oil paint a bewildering number of layers of depth, reflection upon reflection of the world behind and within a city restaurant's plate-glass window. However, Central Savings does share some qualities with Minimalist art. While Estes's picture is very representational, notice that he is not expressing his feelings about this scene. In a methodical way, he is imitating the way a camera records reality, utilizing the harsh contrasts and precise focus of mechanical vision. Like Minimalist pictures, Superrealist pictures are cool and calculated performances.

Precise images like *Central Savings* are not just technical achievements but compositional ones as well. Estes's design of dense, layered spaces is



20-12 Richard Estes, *Central Savings*, 1975. Oil on canvas, 36" × 48". The Nelson-Atkins Museum of Art, Kansas City, Missouri (gift of the Friends of Art), F75-13. Photograph by Jamison Miller

imaginative: complex but balanced. His subjects are always drawn from the world he lives in, typical American metropolitan scenes, but he never imposes his personal viewpoint or glorifies his cityscapes. As with the Pop artist Warhol and the Minimalist Judd, for Estes "cool" is better than emotional. It is probably no coincidence that in the 1960s "cool" first came to mean "good."

Duane Hanson, however, was a Superrealist artist who was interested in breaking down the barriers between artist and viewers and engaging them. Born in rural Minnesota, he wanted to make an honest art that could communicate with anyone who saw it and not "something that looks nice to hang on a wall." He said, "If art can't reflect life and tell us more about life, I don't think it's an art that will be very lasting." By pouring polyester resin into casts made directly from his models and adding real hair, glass eyes, and clothing, Hanson managed to develop perhaps the most naturalistic sculptures ever created. Museum visitors are usually startled when they encounter one of Hanson's realistic figures.

Hanson generally chose to portray one or two subjects in the midst of an ordinary day. He said, "You can't always scream and holler . . . sometimes a whisper is more powerful." Janitor (20-13) is typical of his mature works that speak about the emptiness and loneliness of modern life. The janitor's pose reflects exhaustion and dissatisfaction; he is dressed in soiled clothing. When seen in a museum from as little as a few feet away, Janitor appears to be just another employee. As one approaches it, one senses that the figure has a natural territory like any living being. However, because it is a sculpture, we are permitted to enter his personal space and stare at him in a way no polite person would ever do. The power of Hanson's sculpture is not limited to his craftsmanship or the verisimilitude of his figures or even his messages. His work taps into the voyeuristic nature of art, the fascination of carefully studying another person and gaining access to his or her private world.

ARCHITECTURE: BREAKING DOWN BARRIERS

In the late 1960s, a sculpture instructor at New York University, James Wines, became dissatisfied with the direction Modern Art was taking, especially the isolation of artists from the general public. After discovering that he was not alone with this disenchant-



20-13 Duane Hanson, *Janitor*, 1973. Polyester, fiberglass, polychromed in oil, $65\frac{1}{2}'' \times 28'' \times 22''$. Milwaukee Art Museum, Gift of Friends of Art, M1973.91. Photo by Ephraim Le-ver. Art © Duane Hanson/Licensed by VAGA, New York, NY

ment, he began meeting regularly with like-minded artists and architects. In 1970, *SITE* (Sculpture in the Environment) was formed to establish a new relationship between art, architecture, and the public. Their goal was to search for a "more . . . socially significant content, a new public imagery drawn from a more integrated fusion of the arts."

SITE members were determined not to use references to the past but to "search for sources of content in the present." Their challenge was to "identify an appropriate iconography for a society with no universal symbols." Their first important commissions were showrooms all across the United States for one of the nation's largest catalog merchandisers, Best Products. Few successful architects would have been enthusiastic about this kind of job—a renovation of a typical box-shaped building in a shopping center along a highway—but the earnest SITE artists went to work analyzing the problem. The challenge would be to find a way to attract the attention of motorists who were speeding down the highway.



20-14 SITE, Best Products Indeterminate Façade Showroom, Houston, 1975.

Wines and his associates realized that drivers only pay attention to things that are out of the ordinary, that break the pattern of normal life.

Built in 1975, the *Best Products Indeterminate* Façade Showroom (20-14) in Houston, Texas, is one of their most famous works. By building a white brick façade higher than the structure's actual roof line (like Venturi's firehouse), the designers gave themselves room for imagination. The startling result was a new building that looks as if it is crumbling into ruin. In the tradition of disaster movies, the edges of the façade have become ragged and broken. Bricks tumble down onto the canopy in front, threatening imminent collapse. The doomsday look of the

showroom was hard to ignore; it attracted customers even as it gave notice that American consumer culture was in the process of decay. By looking freshly at architectural problems with an artist's eyes, by ignoring academic approaches but not customer needs, James Wines and SITE continue to create a people-oriented architecture that is stimulating, engaging, and artful.

Renzo Piano of Italy and Richard Rogers of England turned architecture inside out with their design for the *Georges Pompidou National Arts and Cultural Center* (20-15). When the city of Paris first gave the commission for a new museum of Modern Art to the architects, it was very controversial. First,



20-15 Renso Piano and Richard Rogers, Georges Pompidou National Arts and Cultural Center, Paris, 1971–1977.

RT ISSUES Pilgrimages for a New Age

any of the most important sites in Earth Art are in remote locations that are difficult to reach. While this is not surprising, given the large scale of the works and the cost of land, it does demand a great deal from anyone interested in seeing them in person. In essence, a visitor must make a modern pilgrimage. Like a religious one, it requires time, commitment, and dedication.

To reach Walter De Maria's *Lightning Field* (20-16), one has to travel many miles through the desert of New Mexico. The closest town is about 150 miles outside of Albuquerque. Once you arrive there, it is another forty-minute drive to the site. The work itself is four hundred stainless-steel poles spread evenly in a grid over an area of one mile by one kilometer. Each of the poles are about twenty and one-half feet high and two inches in diameter. The organization that maintains the site, the Dia Art Foundation, recommends spending an extended period of time with the work and offers overnight reservations in nearby cabins. While July and August are the best times to see lightning strike the poles, there is no guarantee for any of the pilgrims.



20-16 Walter De Maria, *Lightning Field*, 1977. Four hundred polished stainless-steel poles (2" diameter and 20' and 7½" tall) in a grid of one mile by one kilometer. Southwestern New Mexico. Photo: John Cliett. @DIA Art Foundation

ART ISSUES

The Dia Art Foundation also maintains Robert Smithson's *Spiral Jetty* (see 9-12). Constructed in 1970, it remains the most famous and archetypal earthwork. This enormous fifteen-hundred-feet-long spiral ramp extends out into an obscure spot of the Great Salt Lake in Utah. In the midst of a state park about ninety miles from Salt Lake City, it can only be reached by driving fifteen miles on rough, dirt roads in an all-terrain vehicle. At the shore, there's a sign that reads, "Spiral Jetty, End of Road." Even after making the long trip, one is not guaranteed a view of it. Because of the water level, it is not always visible, but the chances of glimpsing it are much better than they have been in decades. Two years after its construction in 1972, it disappeared beneath the waters and was assumed gone forever. However, in 2002, much to the surprise and delight of the art world, it reappeared when the water levels of the Salt Lake dropped. The location is not far from another important earthwork. Nancy Holt's *Sun Tunnels* (9-13) can be found in a high-terrain Utah desert two hours driving time to the west.

James Turrell's best-known works like Atlan (2-13) use illumination to create a sense of mystery and wonder in a gallery. But for more than twenty-five years, he's been working on a project that uses lighting on a cosmic scale. For his largest work, he says, "the sky is my big studio." The Roden Crater is housed in an extinct volcano on the western edge of the Painted Desert of Arizona. Since the 1970s, Turrell has been reshaping the crater into a bowl whose lighting will change based on the movements of the sun, the moon, and the stars. For the viewer, the sky will also become a huge bowl, attached to the rim of the volcano. Nothing else will be visible; it will be a pure experience of light and nature from a 360-degree panorama, what Turrell calls "celestial vaulting." Built twenty-five miles from the nearest electricity, Turrell uses windmills to generate power. Initially intended to be finished in two to three years, it has become his life's work and is only recently nearing completion. When it finally opens, a maximum of fourteen viewers per day will be permitted, eight of whom will stay overnight in rooms inside the crater designed by Turrell. He believes that the pilgrimage to Roden Crater will be part of the spiritual experience. "The main thing is to make a journey, so that you actually go to something purposely and have time to settle down and empty out the noise and distractions of daily life."

the architects were not French, a tacit acknowledgement that artistic imagination was no longer solely a French commodity. Second, the construction would require the tearing down of many buildings that were centuries old. But probably most disturbing to French critics was the proposed design itself. It had no visible connection to the Modern movement, whose capital had been Paris and whose master-pieces would be housed there. Instead, the architects provided a new, contemporary approach to architecture. They envisioned an ultramodern cultural center, a reflection of an age of new media and scientific advances.

Unlike typical buildings, the "Beauborg" (nicknamed after its Parisian neighborhood) exposes its inner workings—nothing is hidden. The glass walls are surrounded with a network of white columns and scaffolding. The tubular main escalator is attached to this metal grid, rising up the outside like a mechanical glass worm. The Beauborg's life-support system of pipes and ducts (for plumbing, electricity, air circulation, and heat) is not only visible but also boldly announced, painted in bright colors. Walls are all movable; even the floors can be adjusted. Large video screens and banners can be attached to the grid of pipes anywhere on the building.

GOING BEYOND THE ART WORLD

While the sites used by most Earth artists have been situated in isolated locations (see box), the environmental art of the artists Christo and Jeanne-Claude does not shy away from populated areas. They build their works "NEVER in deserted places, and always sites already prepared and used by people, managed by human beings for human beings." Perhaps that is why they have achieved more widespread fame than either Robert Smithson or Nancy Holt (see Chapter 9).

Christo's earliest efforts were concerned with wrapping objects like cans and oil barrels in cloth and seeing how they were changed by the process. He and Jeanne-Claude became international celebrities when the work grew to a monumental scale—wrapping the Museum of Contemporary Art in Chicago and then a mile-long section of the Australian coast in 1969. It was when the work began to be made outdoors that Jeanne-Claude and he became partners on every project. However, for many years, their partnership was kept private. Christo was the public face of the team.

For Christo and Jeanne-Claude, Wrapped Coast, Little Bay, Australia was a success because it allowed viewers to see nature more clearly by drawing a human-made contrast to it. Their even more ambitious Running Fence, Sonoma and Marin Counties, California, 1972–1976 (20-17) of 1976 was planned to draw attention to the glories of the California landscape. Four years in preparation, the final result was an eighteen-foot-high white nylon barrier that



20-17 Christo and Jeanne-Claude, *Running Fence, Sonoma and Marin Counties, California, 1972–1976.* Height: 5.5 meters (18 feet), Length: 39.4 kilometers (24½ miles). 200,000 square meters (240,000 square yards) of woven nylon fabric and 90 miles of steel cable, 2,050 steel poles. Photo: Wolfgang Volz. COPYRIGHT © CHRISTO 1976.

extended for twenty-four and one-half miles across pastures and roads and into the Pacific Ocean. This monumental undertaking cost the artist \$3 million, which paid for materials, a team of lawyers, environmental consultants, engineers, workers, and a building contractor.

As with all of Christo and Jeanne-Claude's environmental works, the funds were entirely their own, raised mostly from the sale of Christo's preparatory collages and drawings describing the project. Because the fence was hung on steel poles with cables for only two weeks, many questioned the high cost of such a temporary artwork. Much of the four years were taken up convincing environmental groups that their plan was safe. Why would they be willing to go to all this trouble? Christo said:

Just as religion was important [in the Renaissance] so are economics, social problems, and politics today. . . . Knowledge of these areas should be an important part of one's work.

The final result *was* breathtaking. Nature cooperated with art by providing innumerable gorgeous settings—sunlight and wind, rolling hills and rocky shore, grazing sheep and grasslands made *Running Fence* a spectacle to behold.

Since then, Christo and Jeanne-Claude have created other environmental works like the *Surrounded Islands*, in Biscayne Bay, Florida, *Umbrellas* in Japan and California, and the recent *Gates* in New York's Central Park, a project that took more than a quarter century to complete (see Chapter 1). Every project has been paid for by the artists. They do not accept grants and they do not use volunteers. For them, "Financing is aesthetic." Every member of the teams that construct the projects is paid. Disposal of the materials used in the projects is also handled by the artists and recycled industrially.

The fact that for decades Jeanne-Claude's artistic partnership with her husband Christo was not made public reflects both the prejudice found in the art world and the difficulty any artist has in achieving success. As they explained it, "The decision to use only the name Christo was made deliberately when we were young because it is difficult for one artist to get established and we wanted to put all the chances on our side." Christo was presented as the artist and Jeanne-Claude as the business manager. It wasn't until 1994 that they revealed that they had been artistic partners on every project since 1961. The ideas for their projects come from either or both of them. According to them, however, there are

two clear divisions of labor: "Jeanne-Claude does not make drawings, she was not trained for that. Christo puts their ideas on paper, [and] . . . Christo never had the pleasure of talking to their tax accountant."

MAKING ROOM FOR WOMEN: JUDY CHICAGO

In 1970, an art instructor at Fresno State College in California placed a statement at her solo exhibition that read:

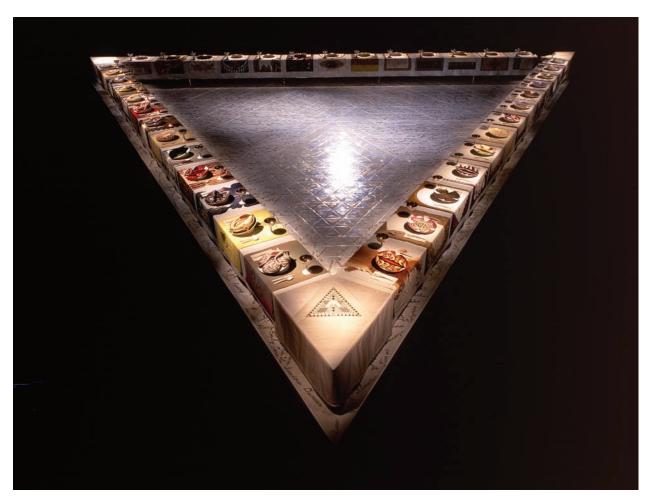
Judy Gerowitz hereby divests herself of all names imposed upon her through male social dominance and freely chooses her own name,

Judy Chicago.

In the same year, she offered a feminist art class that excluded men, in a studio away from her college. The young women not only made works of art but also learned how to use tools. It was the beginning of a career devoted to forcing the inclusion of women in the art world.

The young Judy Cohen grew up in Chicago and was raised in a family that taught equality, so it was a shock for her to learn that America in the 1950s did not share her family's values. Early in her art career, she worked in a Minimalist style (she described this as trying to be "one of the boys") while living in Los Angeles. It was not until 1970 that Chicago made a clean break with the male art world and began making symbolic works using imagery based on female genitalia. During the 1970s, Chicago was a key figure in the birth of the women's movement, organizing Womanspace, a gallery, and the Women's Building, a center for women's culture in Los Angeles. The building housed a multidisciplinary program, called the Feminist Studio Workshop (FSW), where Chicago taught. The FSW encouraged women to explore what it meant to be female and to translate their experiences as women into subjects for artworks. The curriculum included traditional studio classes in art, writing, and video, along with consciousnessraising groups. While the traditional art world was slow to accept the work being done there, Los Angeles became a magnet for talented women from all across the United States and was known as one of the leading centers of the growing feminist movement, and eventually as a world art center.

Chicago's participation in the creation of collaborative artworks that dealt with feminist issues



20-18 Judy Chicago, *The Dinner Party,* 1979. Mixed media, $48' \times 48' \times 48'$ installed. Brooklyn Museum, New York. photo @Donald Woodman.

culminated in her most famous work, a room-sized installation called The Dinner Party (20-18) that was four years in the making. The artist led a team of more than one hundred women in the creation of a triangular table, forty-eight feet on each side. On it were thirty-nine place settings that symbolized the contributions of great women of the past, from prehistoric times to Georgia O'Keeffe. The table rested on a tiled platform on which the names of 999 women were written in gold. The Dinner Party utilized crafts media that in the past had been denied consideration as fine art. Each porcelain plate was a symbolic portrait of the woman honored, and her era was evoked in the design of an embroidered runner. Weaving and needlepoint were also employed. The plates all contain Chicago's characteristic vaginal imagery that aims to "make the feminine holy" (20-19). A companion book was written to tell about the women represented and to explain the symbols used.

In 1978, *The Dinner Party* was exhibited at the San Francisco Museum (it broke all previous attendance records) and then traveled across the country. At the Brooklyn Museum in 1980, more than seventy-five thousand visitors saw it. Chicago explained the purpose of her work as:

A people's history—the history of women in Western civilization. . . . This information, however, was . . . certainly unknown to most people. And as long as women's achievements were excluded from our understanding of the past, we would continue to feel as if we had never done anything worthwhile. This absence of any sense of our tradition as women seemed to cripple us psychologically. I wanted to change that, and I wanted to do that through art.

The face of the art world has been changed by the works of Judy Chicago and many other women artists. Not only have the numbers of women artists



20-19 DETAIL OF: Judy Chicago, *The Dinner Party,* 1979. Mixed media, $48' \times 48' \times 48'$ installed. Brooklyn Museum, New York. © James Luciana.

grown, but the kinds of art and strategies they pursued in the 1970s have become important ones for all artists. Political art, collaborative art, performance art, photographing constructed environments, art that deals with the self and fantasy, and appropriation were all unconventional paths originally taken by creative women artists (see box on p. 458).

CHANGING THE NATURE OF THE GALLERY SPACE: PERFORMANCE ART

Performance art (see Chapter 9) is another way twentieth-century avant-garde artists tried to provoke viewers into a reappraisal of art and life. The Futurists, Dadaists, and the Pop Artists all performed art. Some performance art has been very successful in reaching the general public, like the multimedia concerts of Laurie Anderson (9-10), who began performing on streets wearing ice skates embedded in a block of ice while playing cowboy songs on a violin. Joseph Beuys even became a political force in Germany (9-9) as a leader in European environmental and peace movements. Performance artists are interested in producing unexpected repercussions, even dangerous ones.

The Los Angeles artist Chris Burden drew attention to his concepts with works that deliberately tested his own psychological and physical limits. His most famous (or infamous) work was *Shoot* (20-22) in 1971. Because Burden believes we live in a culture

that is deadened by seeing violent acts portrayed every day on television and in films, he decided to explore and reveal the reality of violence. With inconceivable calm, Burden stood against a wall while a friend standing only twelve feet away shot him in the arm with a rifle. While the plan called for the bullet to simply graze him, the bullet punctured the center of his arm just above the elbow. This did not faze Burden because the performance was about:

Being shot at to be hit ... it's something to experience. How can you know what it feels like to be shot if you don't get shot? It seems interesting enough to be worth doing.... It was horrible but it was interesting.

Two years later, Burden reenacted the ancient legend of Icarus in a modern way (see Breugel's *Fall of Icarus*, 14-40, for an explanation of the myth). In front of invited spectators, he lay on the floor of his studio naked with a long piece of plate glass balanced on each of his shoulders. Two assistants poured gasoline across the glass and then threw matches at the end of the glass until the gasoline was ignited. In seconds, Burden leapt up and the pieces of fiery glass crashed to the floor.

Burden's horrifying performances are meant to set up an energy between him and his audience. They bring a vividness to danger and violence that he feels our culture has lost. Like many of the artists in this chapter, he is concerned with reestablishing art as a vital, living presence in people's lives. He does this by creating memorable events that challenge our basic assumptions about what an artist is supposed to do and what is art.

RT ISSUES

Why Isn't a Woman's Place in the Museum?

or the past five centuries, an unstated, unofficial, possibly unconscious, but apparent censorship of the artwork of more than half the population in the West has occurred. Although they have been making art as long as it has existed, until recently women have been systematically excluded from most museums and art histories. As women's status has risen in the last 150 years, so have the number of professional women artists. Yet, a visitor to U.S. museums or readers of art history texts from just twenty-five years ago would have seen the almost complete absence of any sign of art created by women. Recently, the censorship of women has begun to slowly subside, mostly as a result of the efforts of women themselves.

However, the traditional measures of success—solo shows in galleries, retrospectives in prominent museums, representation in scholarly works and texts—were slow in coming. For example, before 1987, the National Gallery of Art in Washington, D.C., had in its entire history only one retrospective of a woman artist, Mary Cassatt. Until 1986, the most successful college art survey text in the country did not include the work of a single woman, despite having more than one thousand illustrations. The author stated that unfortunately there had been no women "great enough to make the grade." After his death, his son included twenty-one women

in the 1986 edition, out of more than a thousand artworks.

The Guerrilla Girls (20-20) are a coalition of artists whose goal is to keep continued pressure on the art establishment to eliminate bias against women. Formed in 1985, they describe themselves as "the conscience of the art world."They began by working secretly, under cover of darkness, plastering posters around Manhattan. Even today, their identities and overall number are unknown; all photographs show them wearing large gorilla masks. They receive mail at a post office box and conduct interviews by phone or email. With simple, well-designed posters (20-21), the Guerrilla Girls give status reports on the art world's acceptance (or lack of it) of women. Their first poster listed forty-two of the most well-known contemporary male artists and asked, "What



20-20 Guerrilla Girls, 1985. Courtesy Guerrilla Girls, West.

ART ISSUES

do these artists have in common?" The answer was, "They all allow their work to be shown in galleries that show no more than 10 percent women or none at all." A press release warned of more posters ahead, "Simple facts will be spelled out; obvious conclusions can be drawn."The feminist activists were not going to allow male artists to escape responsibility for their galleries' exclusionary policies. Other posters pointed out that in one year, the four major New York City museums had only one retrospective for a woman. Another reminded us that "Women in America earn only 2/3 of what men do. Women artists earn only 2/3 of what men do." A 1989 poster directed to collectors asked:

20-21 Guerrilla Girls poster, c. 1987. Courtesy Guerrilla Girls, New York.

WHEN RACISM & SEXISM ARE NO LONGER FASHIONABLE, WHAT WILL YOUR ART COLLECTION BE WORTH?

The art market won't bestow mega-buck prices on the work of a few white males forever. For the 1.77 million you just spent on a single Jasper Johns painting, you could have bought at least one work by all of these women and artists of color:

Anni Albers
Sofonisba Anguisolla
Dione Arbus
Vonessa Bell
Isobel Bishop
Rosa Bonheur
Elizobeth Bougereou
Margaret Bourks-White
Romaine Brooks
Julia Margaret Cameron
Emily Carr
Rosalba Carriera
Mary Cassalt
Constance Marie Charper

Lovinic Fontono Meta Warwick Füller Artemisis Gentilleschi Morguérite Gérard Natolia Goncharova Kate Greenaway Barbara Hepworth Eva Hesse Hannah Hoch Anna Huntingdon May Howard Jackson Frida Kahla Angelica Koulfmann Hilma of Klimt Kathe Koulfwizz Dorames Lange
Marie Laurencin
Edmonis Lewis
Judith Leyster
Barbara Longhi
Dora Maor
Lee Miller
Lisette Model
Poulo Modersohn-Becke
Tina Modolis
Berthe Morisot
Grandmo Moses
Gobriele Münter
Alice Neel
Louise Nevelson

Sarah Peole
Ljubova Popova
Olga Rosanova
Nellie Mae Rowe
Rochel Ruysch
Kay Sage
Augusto Savage
Vavara Steponova
Florine Stethleimer
Sophie Taesber-Arp
Alma Thomas
Marietta Robusti Tintoretto
Suzanne Voladon
Elizabeth Vigée Le Brun
Loura Wheeling Waring

Please send \$ and comments to: GUERRILLA GIRLS CONSCIENCE OF THE ART WORLD

When Racism & Sexism are no longer fashionable, what will your art collec-

tion be worth? The art market won't bestow megabuck prices on the work of a few white males forever. For the 17.7 million you just spent on a single Jasper Johns painting, you could have bought at least one work by all of these women and artists of color:

A list followed with the names of sixty-seven artists, most very well-known and respected, from the Renaissance to the present, including Artemisia Gentileschi, Judith Leyster, Elizabeth Vigee-Lebrun, Angelica Kauffman, Eva Hesse, and Georgia O'Keeffe.

While few would admit it, the posters seem to have had an effect on the prominent art institutions they have targeted. The Whitney Biennial, for example, the most important national survey of contemporary art, had only a 24 percent representation for women in 1987. Two years later, it was 40 percent. In 1999, in an effort to change the way art history is presented, they wrote their *Bedside Guide to the History of Western Art*. The first line is, "Forget the stale, male, Yale textbooks. This is Art Herstory 101!"

Still, equality and an end to sexual discrimination remain distant goals. Although women are having more exhibitions in both galleries and museums than ever before and textbooks are changing, a walk through the permanent collection of any major museum is still fundamentally a tour of the history of male artists. When the Guerrilla Girls revisited the Metropolitan Museum in New York, they found the number of women artists exhibited had actually gone down from 5 percent to 3 percent in the last fifteen years. But 83 percent of the women seen in the artworks were nudes. So they reposed the question from one of their first posters in 1989: "Do women have to be naked to get into the Met. Museum?"









20-22 Chris Burden, *Shoot*, performed at F Space on November 19, 1971. "At 7:45 p.m. I was shot in the left arm by a friend. The bullet was a copper jacket .22 long rifle. My friend was standing about 15 feet from me." Courtesy of the artist.

James Luna reminds us that Native Americans are real, living human beings rather than primitive, innocent tribespeople from a distant past. His *The Artifact Piece* (20-23) was exhibited among the collections of Native American artifacts in the Museum of Man of San Diego in 1987. Inside a glass case was the artist himself resting on sand with his name on one label and his scars from injuries listed on three others. Other cases contained ceremonial objects from his reservation. Viewers who had come to the museum to admire the beauty of American Indian culture could not leave without considering the life many contemporary Native Americans live.

THE ART WORLD BECOMES GLOBAL: POSTMODERN ART AND THE NEW IMAGE

In the 1970s, Western Europe had finished its recovery from the devastation of World War II, and new hubs of economic power had emerged. One of the most important was Germany, which returned to its prewar importance in art. The contemporary German artist, Anselm Kiefer, was a student of Josef Beuys. Beuys had urged young artists to begin to meet "the task facing the nation," to confront the

"terrible sins and indescribable darkness" and "consummate a process of healing." Even though he was born just as the war was ending for Germany, Kiefer knew the Nazi past was an inescapable part of his heritage. He vowed to deal with the "terror of history" so he would no longer be dislocated from the past and could regain the valuable parts of his culture as well. Kiefer's work is a search for identity, both personal and national.

Märkische Heide (20-24) of 1974 focuses on the German landscape. Landscape had been a traditional theme of great German painting since the Romantic Era (see Caspar David Friedrich in Chapter 16). But Kiefer's scene is a desolate panorama. March Heath, southeast of Berlin, has been the site of battles for centuries. Because "you cannot just paint a landscape after tanks have passed through it," Kiefer puts the viewer in the midst of a scorched and blackened land with bare trees. The vista is huge, as is the picture (nearly nine feet long). The sky is distant and gray; the road is broken. Kiefer painted his image on burlap, the roughest, lowest grade of canvas; the surface is as dense and complex as a work by Jackson Pollock. On top of the layers of acrylic and oil paint is thick black shellac that runs like blood over the clods of earth.

Because Kiefer combines vigorous brushstrokes with emotion-laden imagery, his pictures have been labeled **Neoexpressionist**, or a revival of Expressionism. However, unlike the emotionally direct



20-23 James Luna, *The Artifact Piece* (detail), 1987. Mixed-media installation and performance at the Museum of Man, San Diego.



20-24 Anselm Kiefer, Märkische Heide, 1974. Oil on canvas, 46 ½" × 100". Stedelijk Van Abbemuseum, Eindhoven, Netherlands.

German Expressionists of the early twentieth century (Chapter 18), Kiefer combines references to many eras of his country's history at once. At the time of its painting in 1974, the area known as March Heath was one of the lands that had been lost in the split of Germany into East and West. It was meant to remind viewers of the price of militarism. German viewers would also associate the title with a song of the same name that Hitler's armies had marched to.

It has been said that Anselm Kiefer's work is not really Modern at all, but what is called Postmodern Art. The dominant trends of Modern Art—a rejection of the past, a steady movement toward abstraction, and a disinterest in the average viewer—have been reversed by many vanguard artists since the 1970s. Postmodern artists like Kiefer are interested in rediscovering the past, not rejecting it. They aim to speak in clearer images and see history as a vast menu from which to select. They certainly draw on the Modern movement, but they see it as just one historical movement among many consecrated in museums and not the only choice or even the most important one. Kiefer, along with several other German artists, is also seen as a pioneer in what has been labeled The New Image—a return to imaginative and meaningful representational painting, which many modern artists and critics had said was no longer possible in Western art. The Italian artist Francesco Clemente (4-6) has also been linked with this movement. He shares with Kiefer an interest in myths and a search for

spiritual meaning, but his work is more personal, some suggest narcissistic. We see in his art, he says, "my fantasies, my private musings."

NEW APPROACHES TO AUTOBIOGRAPHY

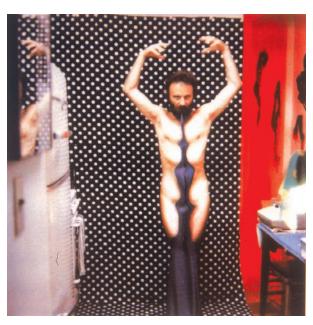
A renewed interest in the self-portrait and self-exploration has inspired many contemporary artists. Many, like Clemente, have transformed traditional media into surprising new forms. Louise Bourgeois (see 2–10) met the French Surrealists (whom she describes as "father figures") as a young woman growing up in Paris. Bourgeois says that she uses her art to help rid herself of fears and anger. Her sculptures are therapy of a kind, necessary because:

The unconscious is something which is volcanic in tone and yet you cannot do anything about it. You had better be its friend, and accept it or love it if you can, because it might get the better of you. You never know.

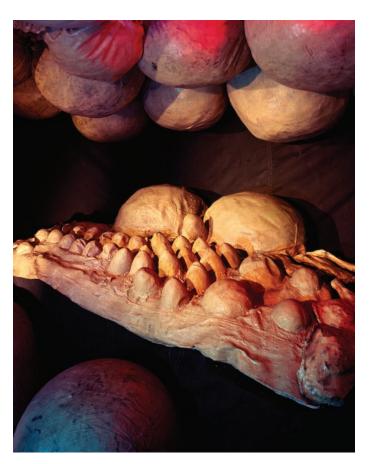
The Destruction of the Father (20-25) is a recreation of a violent fantasy and one of her most powerful works. Bourgeois describes it as "a very murderous piece, an impulse that comes when one is under too much stress and one turns against those one loves the most." This seems to prove Sigmund Freud's theory that old conflicts never die if they are not brought out into the open and resolved. Completed when

she was sixty-three, Bourgeois still remembered in anger her father's bullying ways and how he betrayed her mother with many mistresses. As a child she had fantasized one day at the dinner table when he was "going on and on, showing off" and forcing his family to listen, that she, her mother, sister, and brother suddenly grabbed her father, tore him limb from limb, and ate him. The Destruction of the Father is set in a frightening cave (inspired by a visit to Lascaux, site of the prehistoric cave paintings, 1-10, 1-11) with drooling alligator jaws and scattered organic shapes that look like shredded body parts. Huge breastlike sacks loom overhead like a crowd of women exacting their revenge. In a corner of the installation is a round shape suggesting a man's head. To build this horrible environment, Bourgeois poured and shaped liquid latex over plaster and wood forms. After a half-century, Bourgeois exorcised her childhood anger, guilt, and fear with the creation of a scene of nightmarish retribution.

In the early 1970s, Lucas Samaras was one of a group of artists selected by the Polaroid Corporation to experiment with SX-70, a new instant film it had developed. The new film, he discovered, had one major difference from conventional film—its soft chemical emulsion was malleable for a few minutes before it dried. By scratching and pushing it, he could achieve bizarre effects that were most likely not on the Polaroid scientists' minds when they



20-26 Lucas Samaras, *Phantasmata* series, 1976. SX-70 Polaroid print, approximately 3" × 3". Pace/MacGill Gallery, New York. Reprinted with permission of the artist.



20-25 Louis Bourgeois, detail of *The Destruction of the Father*, 1974. Plaster, latex, wood, fabric and red light, 93 %" × 142 %" × 97 %". Courtesy Cheim & Read, New York. Photo © by Peter Moore.

developed the film. For the SX-70 experiments, Samaras set the camera on a tripod and put on the timer to allow himself to enter a scene of his own devising. *Phantasmata* (20-26) required a great deal of planning. Set in his kitchen, Samaras poses for the camera with a polka-dot sheet behind him. To the right, dark shadows of limbs have been attached to the wall, and the room is bathed in red light. Reaching up his arms in a position of surrender, the photographer grips a blue blanket in his mouth. By playing with the emulsion at the center of the picture, Samaras created the illusion that the blanket is a dark pedestal and he is a living sculpture. His legs appear to have melted into the blanket/pedestal, which has now also fused with his torso.

Like the imaginary self-portraits by Cindy Sherman (7-20) and Sandy Skoglund's *Radioactive Cats* (6-12), the carefully planned environments of the phototransformations debunk the old truism that "the camera never lies." Samaras was an innovator not only

in staging scenes but also in the manipulation of the physical photograph itself a part of the repertoire of illusionistic photography.

Lucian Freud's self-portrait Painter Working, Reflection (20-27) is far from contrived. Freud, the grandson of the founder of psychoanalysis, is known for his brutally honest portraits. He describes in oils not just the personality of his subjects but also the corporeal body that contains them with unpleasant specificity. Blood vessels seen through the skin, rolls of fat, blemishes, and every other flaw do not escape his eye. His application of paint is thick and almost flesh-like. Even when the subject is himself, he does not turn away from the effects of aging or the apparatus of sexuality. In his self-portrait, Freud stares down, his palette knife held up somewhat threateningly, his palette openly turned to us. The comic open boots on his feet only accentuate his nude body and the humiliating changes that are inevitable as one ages.



20-27 Lucian Freud, *Painter Working, Reflection*, 1993. Oil on canvas, $40'' \times 32 \frac{1}{2}''$. Private Collection.

POSTMODERN ARCHITECTURE

With the easy access artists now have to both fine art and popular art images of every period and culture, artworks can assume a variety of guises, depending on their goals. In the mid-1960s, the buildings and theories of Robert Venturi gave architecture a head start on the Postmodern notion of exploiting rather than rejecting history. Since then, a more complete definition of Postmodernism in architecture, as well as the other media, has evolved. Postmodernism is a movement that prefers improvisation and spontaneity to perfection (ideas reminiscent of sixteenthcentury Italian Mannerism). Instead of one style, the Postmodern artist combines several contradictory styles with wit. Sometimes called neo-eclectic, in this approach it is not considered important if the styles do or do not ultimately make a resolved whole. As we saw in the work of James Wines and SITE, a Postmodern building is not simply functional, it is also like a sculpture by the architect.

One of the iconic figures in Postmodern architecture is Frank Gehry. His most famous building is the Guggenheim Museum in Bilbao, Spain, which set the standard for contemporary museum design (10-33) and transformed a town that had lost its industries into an international destination. However, Gehry has been an innovative architect since the 1970s. The remodeling of his home in Santa Monica (where he still lives) transformed a typical suburban house into an assemblage of industrial materials, composed asymmetrically. His Nationale Nederlanden Building in Prague (20-28) is an imaginative reflection of the elements in the traditional rowhouses that surround it. The two towers at the corner are known as "Fred and Ginger" because of the way one twists toward the other like the famous dancers from Hollywood films. The pinched waist and twist of "Ginger" has a purpose besides decoration—it preserves the view of a castle for the apartment dwellers next door.

Frank Gehry has called Rem Koolhaas, "one of the great thinkers of our time." For many years, the Dutch architect was known more for his writings on architecture and theoretical drawings than for his buildings (much like Zaha Hadid, see Chapter 10). Few projects ever got past the model stage. He has written that buildings should be "superradical and brutal" and exhibit stress from idiosyncratic combinations of forms and materials that appear unstable. But their final design should not be a result of any



20-28 Frank Gehry, Nationale-Nederlanden building, Prague, 1992–1996.

theory or style but determined by studying the conditions at their location. Identical projects in Chicago and Hong Kong should result in very different buildings. Enthusiastic about the rate of global change, he also believes that technology and social justice can be allies.

Koolhaas's Seattle Public Library (20-29) fits both his theories and the community it serves. Designed to honor the book and integrate new technologies, and based on studies of libraries all around the United States, the eleven-story building is divided into different layers, each with its own function, color scheme, and materials. Holding it all together visually is a net of steel diamond shapes whose design and structure is separate from the functional parts inside, making it easy to see from floor to floor. The enormous amount of glass in the building's skin makes it feel transparent (20-30). Books are found along a four-story ramp that spirals upward, a "continuous collection." Stairs and escalators are easy to find—they're a bright, glowing chartreuse. Contemporary art is found throughout the building. A wooden floor is carved with quotes from the foreign language collection. As you go up one escalator, you see imbedded in the wall bizarre projected videos by Tony Oursler (9-25). The chief librarian calls it "the first library of the twenty-first century."



20-29 Rem Koolhaas, Seattle Public Library, Exterior, 2004.



20-30 Rem Koolhaas, Seattle Public Library, Interior, 2004.

CONTEMPORARY NONREPRESENTATION

In our pluralistic era, it is important to keep in mind that Postmodernism is only one, albeit important, approach. There continue to be many serious practitioners of nonrepresentational art, both young and old. Until his death in 1993, Richard Diebenkorn was the elder statesman of contemporary nonrepresentational painting. The Ocean Park series (20-31) was a nearly twenty-five-year exploration of the radiant Southern California light. While the series is certainly totally abstract, Diebenkorn admitted, "temperamentally, I have always been a landscape painter." In his pictures nothing is hidden; the viewer can follow the artist's struggle to resolve the composition through the thin, almost transparent layers of paint. His achievement is that he has managed to fuse the rigors of abstraction with the serene pleasures of the landscape.

A combination of sincerity and a sense of peace also characterizes the abstract sculptures of Martin



20-3 Richard Diebenkorn, *Ocean Park No. 79*, 1975. Oil on canvas $93'' \times 81''$. The Philadelphia Museum of Art.

Puryear. While recognition was slow to come to him (he did not have a solo show in New York City until he was forty-six years old), his selection to represent the United States at the São Paulo Bienal in 1989, and his first-prize award, mark him as one of the most important contemporary sculptors. Puryear grew up in Washington, D.C., but has had a truly international education. After graduating from college in 1963, he joined the Peace Corps. His African assignment in Sierra Leone had a profound effect on the young black artist. Even though he was there primarily as a teacher, he learned a great deal, too. He experienced tribal art-making firsthand, studied the methods of the traditional wood carvers, and saw, he said, "a level beyond" realism. Puryear found that abstraction could be more alive than representational art; it could have a magic quality. After his term was over, he went to Stockholm and researched Scandinavian woodworking methods. He has since studied traditional Japanese and Mongolian crafts. He likes working in wood because "if you've got the right tools, you can do it all using your own physical body power."

Puryear's sculpture has been described as Postminimalist because of the simple nature of his forms, but he dislikes the label. "I was never interested in making cool, distilled pure objects. Although idea and form are ultimately paramount in my work, so are chance, accident, and rawness." For Plenty's Boast (20-32), Puryear appears to have drawn inspiration from brass horns and a Thanksgiving cornucopia. It also resembles a domestic animal curled up on the floor, letting out a big yawn. While at a distance, the sculpture seems carefully refined and sanded, up close one can see that, like Diebenkorn, Puryear does not cover up the signs of the process he used to construct his art. In contrast to Judd's minimalist boxes, these are clearly handcrafted sculptures. Puryear says, "I enjoy and need to work with my hands."The marks of the staples that held the wood together during gluing are still there. He never sands his woodwork, but planes it, leaving a rougher surface.

Each of Puryear's sculptures seems to change personality as you walk around it. From one angle, it might look like a bent megaphone, from another, a collection of hooped hat boxes. Like much Postmodern art, Puryear's work carries many associations from different artists and cultures, but he has also managed to fuse these diverse sources into coherent, whole, earthbound sculptures. This may explain why his organic abstractions have a gentle, calming effect on the viewer.



20-32 Martin Puryear, *Plenty's Boast*, 1994–1995. Red cedar and pine, 68" × 83" × 118". The Nelson-Atkins Museum of Art, Kansas City. Purchase: The Renee C. Crowell Trust.

20-33 Tim Hawkinson *Überorgan*, 2000. Approximately 300' × 28'. Mixed-media installation at MassMOCA, North Adams.

Like Puryear's sculptures, Tim Hawkinson's Überorgan (20-33) suggests many different structures and creatures. Hung from the ceiling, the massive mix of a bagpipe and a pipe organ perhaps resembles German blimps tethered together, a colossal invader with tentacles from a distant planet, the internal organs of a giant, or according to the artist, "kind of whales suspended in the air and hovering about you." It is constructed from enormous bladder-shaped balloons that undulate and expand as the air rushes through them. Long, rubbery pipes direct the air across the ceiling. The organ's deep sounds are controlled by a computer that reads a two-hundred-foot player piano scroll fed by a loom-like contraption. The sheer scale of Überorgan—it filled a room that was as long as a football field with a ceiling three stories tall-makes it difficult to categorize. Is it a huge sculpture, a performance, a sound work, or a room-size installation? For Hawkinson, like many contemporary artists, categories have really lost their meaning. What's important is achieving one's vision.



CONTEMPORARY INSTALLATIONS

Installations, like those of Kenny Scharf (9–11), continue to be an important art form for contemporary artists. Betye Saar, whose boxed assemblage The Liberation of Aunt Jemima we saw in Chapter 1, is one of many sculptors who have recently moved from relatively small-scale sculptures to gallery installations. However, her motivation was unusual. House of Gris Gris (20-34) was a 1990 collaboration with her daughter, Alison, who is a sculptor most comfortable working on a large scale. The house is a tin shanty with chicken-wire walls filled with brush, leaves, and moss. The ceilings and floors of the house are painted. Its name is from an African charm, and the installation contains African-American ritual objects from Africa, Haiti, Mexico, and the South. For example, the tree branch with bottles at the entrance is known as a "spirit tree"; the empty bottles can capture souls. The hanging wings and oversized body parts outside the shack signify healing. The overall tone of House of Gris Gris is both ordinary and metaphysical.





20-34 Betye Saar and Alison Saar, *House of Gris Gris*, 1990. Mixed-media installation at the UCLA Wight Art Gallery, Los Angeles, CA.

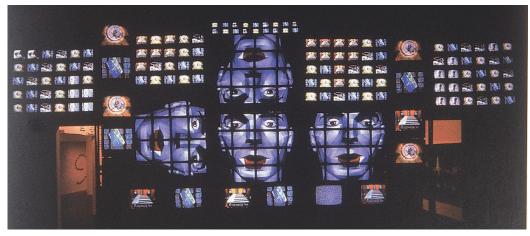
The mood of the multimedia installations (20-35) by Assume Vivid Astro Focus are far from ordinary. Born Eli Sudbrack, the Brazilian artist now makes his home in New York City. His installations (whose titles are the same as his artistic name) are filled with images, music, and moving lights—more like a dance club than a gallery experience. At the center of the version he produced for the 2004 Whitney Biennial was a spiral staircase with colored projecting lights at the top. As a brilliant color changed, different parts of the decorated walls, floors, and ceilings were revealed. The images are a mix of past popular culture, cartoons, gossip, and fashion and girlie magazines. Reminiscent of both the psychedelic era and disco, the effect of all of his installations is highenergy sensory overload. Assume Vivid Astro Focus's goal is to "reach people in ways they don't even know they are being reached."

NEW ELECTRONIC MEDIA

In the last thirty-five years, new electronic media have been added to the list of artists' materials, providing visual artists with tools that apparently have endless possibilities. Electronic media is a rapidly changing area of exploration that includes video art, animation, and digital art. These types of electronic art are often combined with each other and more traditional media.

20-35 Assume Vivid Astro Focus, *Assume Vivid Astro Focus 8*, 2004. Installation at 2004 Whitney Biennial.

20-36 Nam June Paik, *Fin de Siècle II*, 1989. Video installation, approximately 300 television sets, three-channel color video with sound, dimension variable. Private collection.



Nam June Paik was the father of video art and a leader in its combination with new technologies. In his early *TV Buddha* (8–4), a traditional sculpture of the Buddha appears to be watching his own "live" image intently on a monitor. But Paik's video art was not limited to simple ("single channel") images of sculptures. In 1989 in New York City, his *Fin de Siècle II* ("end of the century," **20-36**) introduced the Whitney Museum's exhibition "Image World—Art and Media Culture." Visitors entering the black room were confronted with a wall of about three hundred television sets launching a barrage of rapidly changing pictures with a loud collage-like soundtrack. The images were a visual stream of consciousness: people dancing, abstract computer imagery, David



Bowie singing, and more. At times, groups of twelve or sixteen televisions formed larger pictures, like four three-dimensional computer-generated heads that turned jerkily, ninety degrees at a time. Sometimes the soundtrack connected with the pictures; at other times it became just a clash of white noise and a hundred voices. There was no beginning or end, just the endless bombardment of stimuli that seems to characterize our visual environment, a storm of images.

The medium of video art, like the other artists' media, can take many different forms and present a wide range of visions, depending on the artist's intentions. Matthew Barney's Cremaster Cycle is five feature-length films shot in digital video over six years. They are opulent productions filled with elaborate costumes, prosthetic makeup, mythic references, and symbolic and strange imagery. Illogical, like dreams, it is not the stories but the ideas and images that are memorable. CREMASTER 3 (20-37) is three hours long and involves a myth of the construction of New York's Chrysler Building. The artist Richard Serra (see box in Chapter 3) appears as the ancient architect of the Temple of Solomon. Barney plays two roles: an apprentice and the murderer Gary Gilmore. At one point, the scene shifts to the Guggenheim Museum, and the artist is seen climbing up the outside of the circular ramps from level to level. He's dressed in a kilt and has a cloth stuck in his bloody mouth. At the museum's center,

20-37 Matthew Barney, *CREMASTER 3*, 2002. Production still. Two silkscreened digital video disks, stainless steel, internally lubricated plastic, marble, and sterling silver in acrylic vitrine, with 35-mm print; color digital video transferred to film with Dolby Digital sound, 3:01:59, Edition 8/10, vitrine: 43 ½" × 47" × 40". ©2002 Matthew Barney, Photo: Chris Winget. Courtesy Gladstone Gallery



20-38 Motohiko Odani, *Rompers*, 2003. DVD, color video with sound. 2 minutes 52 seconds looped. Courtesy of Yamamoto Gendai, Tokyo, Japan.

a group of Las Vegas showgirls gesture dramatically. Other characters include a half-leopard woman who has glass legs. In another scene at the Saratoga racetrack, the muscles of trotting horses tear off their bodies as they run a race. Throughout the surrealistic film there are many strange sculptures (which Barney also exhibits in galleries) in which Vaseline often plays an important role. He claims the films are simply elaborate vehicles for the sculptures. He prefers to exhibit his sculptures along with related drawings and photographs when screening his films.

Unusual creatures are also featured in Motohiko Odani's *Rompers* (20-38), but the mood is playful and sweet. The setting appears to be a natural paradise. An innocent girl sits on a branch swinging her legs and singing a strange melody, with her hair held up by small fruit. The animals and insects all appear to be in harmony. We notice that her eyebrows seem a bit raised, her fingers are very long, and her eyes are unnaturally yellow. The tree has a large orange wound that drips a honey-like sap. But it is not until her tongue flies out like a frog's to catch a fly that we realize she is either not human or we are seeing mutants from our planet's future. Below the girl, frogs with ear-shaped wings circle a puddle.

A different surprise awaits viewers of Eve Sussman's 89 Seconds at Alcázar (20-39). As the film begins, it appears to be an elaborate costume drama. We are looking in on characters dressed in Spanish seventeenth-century costume. They move around the room talking quietly. The lighting is dark but beautiful. We can't quite hear what the characters are saying, but by observing their movements and body language, we begin to understand their relationships. Some are servants. There is a beautifully dressed young girl that everyone defers to. As the high-definition video nears the end after ten minutes, its subject suddenly becomes clear and the whole film takes on added depth. These are the people portrayed in Velazquez's Las Meninas (15-17), one of the greatest masterpieces of Baroque painting. They are taking their places for the grand portrait. The girl is the Infanta. We are in the role of the King and Queen of Spain, who are peeking into the court painter's studio and whose presence is revealed (as in the painting) by the mirror on the back wall. Finally, the very moment that Velazquez made immortal comes, and then the characters move back into their lives again.

GLOBAL ART WORLD

While New York remains the center of the art world today, important communities of artists can be found in many cities and on many continents. Takashi Murakami is one of the leading figures in Japanese contemporary art. His art bridges many media, both high and low. In Japan, these distinctions have never been important. Murakami makes paintings, inflatable sculptures, and also designs Louis Vuitton handbags, watches, and collectable figurines. References to Hokusai, anime, and manga (see Chapter 8) are common in his work.

Murakami is best known for his cheerful cartoon characters; his most popular one is Mr. DOB (20-40). DOB has been presented in many guises. Sometimes he is simply cute, at other times ferociously angry with razor-sharp teeth. According to the artist, "DOB is a self-portrait of the Japanese people. He is cute but has no meaning and promotes a sarcastic understanding of the truth."

Murakami has studios and factories in both Tokyo and New York. Sometimes grouped with other Japanese artists as part of a Tokyo Pop movement, like Andy Warhol, he uses assistants to produce his work. He has a staff of around eighty people who regularly punch-in at work with timecards. His most recent



20-39 Eve Sussman, *Her Back to the Camera*, 2004. Screen grab from 89 Seconds at Alcázar. Whitney Museum of American Art, New York. Partial and promised gift of Jeanne L. and Michael L. Klein 2005.86. Courtesy Eve Sussman & The Rufus Corporation

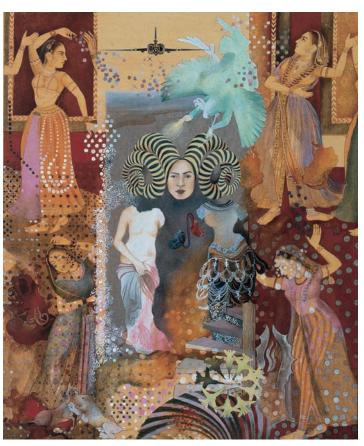
pictures are drawn on a computer and then handpainted by his assistants. Murakami cheerfully sells his products. He knows that the owners of galleries are concerned that the production of too much work will lower his prices, but he says, "I don't think so. If there is demand, I will keep making them."

Shahzia Sikhander's approach is quite different. The Pakistani artist meticulously handpaints her pictures with a fine squirrel hair brush, mixing the traditional styles of Hindu and Persian painting. She was trained in Islamic court painting at the National College of Art in Lahore, but she uses these techniques to make images with personal imagery. "My whole purpose of taking on the subject was to break the tradition," Sikhander says, "to experiment with it, to find new ways of making meaning."

Many of her pictures, like *Pleasure Pillars* (20-41), explore issues of female identity. In the center, ideal images from ancient Western and Eastern cultures are compared. Between them, blue and red hearts are connected. The ancient women seem to be under attack by a flying white hawk-man. The dancing women at the top seem more shocked by the modern fighter plane that is just leaving the scene. By adding personal imagery and references to modern



20-40 Takashi Murakami, *AND THEN Rainbow DOB*, 1999. Acrylic on canvas on board. $1000 \times 1000 \times 50$ mm.



20-41 Shazia Sikander, *Pleasure Pillars*, 2001. Watercolor, dry pigment, vegetable color, tea and ink on wasli paper. Image courtesy of Sikkema Jenkins & Co.

warfare, Sikhander is extending centuries-old artistic traditions and giving them fresh life in the twenty-first century.

Giuseppe Penone has found a unique way to reach back into the past to make a contemporary art form. In 1999, a powerful wind storm knocked down thousands of the huge trees in the Gardens of Versailles (see Chapter 11), trees that had stood for centuries. This terrible loss to a masterpiece of landscape design was bemoaned by the arts community. Penone purchased one of the great fallen Atlas Cedars with the idea of making a sculpture from it. When he began carving into it, he discovered a miraculous thing: behind every knot on the bark, the original branches remain inside the trunk (20-42). Over the next two years, Penone dug into the massive eleven-thousand-pound tree and was able to reveal the original slender tree that the great cedar had grown from. His Cedre de Versailles (20-43) is now a window into a distant past. Inside,



20-42 Giuseppe Penone at work on his Cedre de Versailles, 2002. Centre Pompidou.

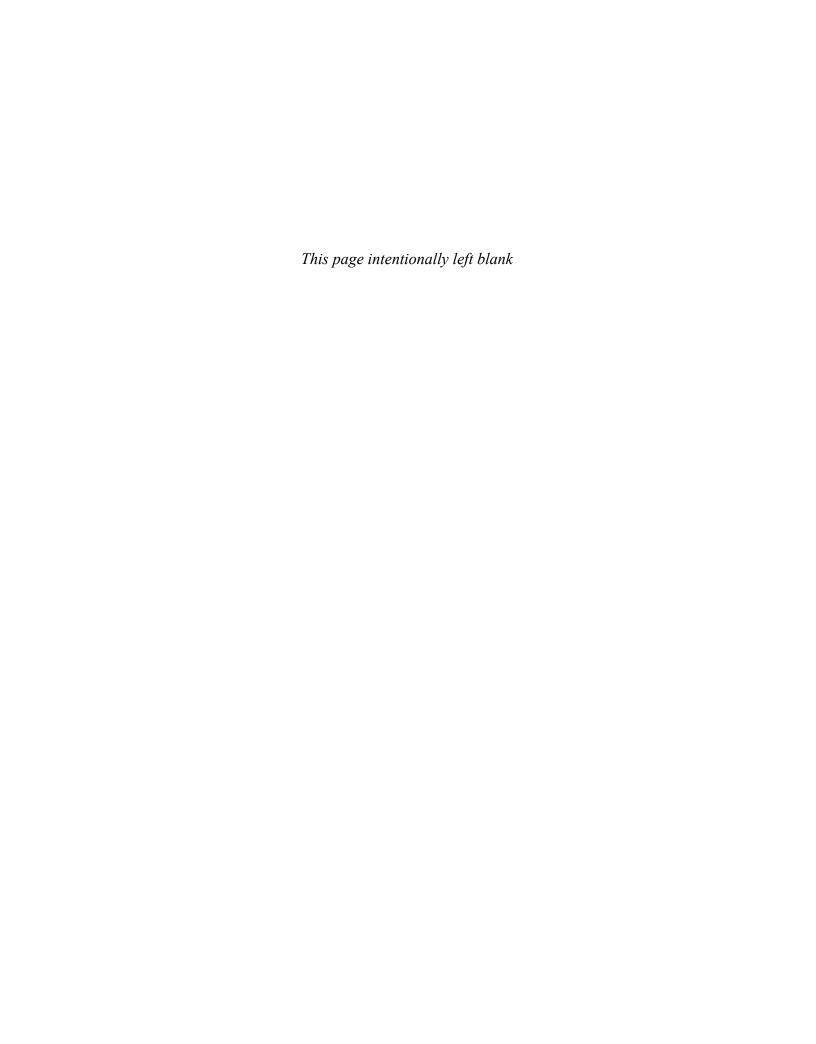
we can see one of the young trees that were planted in the seventeenth century, during the reign of Louis XIV.

Penone, Sikhander, and Sussman are not alone among today's artists in finding new vitality in old sources. In the twenty-first century, the whole history of art is accessible and available to artists. The mine of the past is a rich and deep one, as are the wide range of media and techniques.

Today's storm of images began with a trickle when the printing press was invented in the fifteenth century. Television, computers, and the World Wide Web are just the most recent developments in a centuries-long history of more and more images becoming available to more and more people. The death of art announced in many obituaries written by artists and art critics during the heyday of Minimalism in the 1960s has come and gone. We are now in what is called a Postmodern and pluralistic era, a period of exploration of seemingly endless possibilities for every medium, new and old. Artists are now justifiably suspicious of anyone who announces that there is only one logical style or approach to making art. The history of the last hundred years—in fact, the whole history of art—is littered with the remains of generations of "true" art. To wait and see what the legions of artists will produce is one of the most pleasurable parts of the power of art today.



20-43 Giuseppe Penone, Cedre de Versailles, 2002.



GLOSSARY

- **Abstract Expressionism** An American art movement that began in the 1950s. Large-scale art that combined Expressionism's potent psychological content and the gestural application of paint with an abandonment of any clear reference to the visual world.
- **abstract shapes** Representational organic or geometric shapes that have been simplified. Even when they have been reduced to their basic underlying forms, distorted or exaggerated, the original sources of abstract shapes remain recognizable.
- academic art Art officially sanctioned by the national academies (schools of art) in Europe. In the eighteenth and nineteenth centuries, the academies upheld traditional approaches, encouraging art in Classical or Renaissance styles with epic historical and literary themes. In the modern era, it has come to mean conservative and unimaginative art.
- acrylic A water soluble paint that dries quickly and can be applied to most surfaces. Originally made for industrial use in the 1950s, its medium is plastic polymer made from resins.
- **Action Painting** The energetic brushwork of Abstract Expressionism, apparently done in fits of intense and almost violent activity.
- **additive sculpture** As opposed to subtractive, sculpture that is *built up*, such as by modeling a flexible material like clay or plaster, or by building an installation.
- adobe A kind of sun-dried brick made of clay mixed with straw, used for building by native tribes of the Southwest and parts of South America.
- Age of Reason See Enlightenment.
- **airbrush** A spraying device that uses an air compressor to propel paint mist through a nozzle.

- **alla prima** Paintings done quickly and at one sitting, with little or no preparation. Means "at the first."
- **Allegory** A form of art in which human characters personify certain qualities or ideals.
- analogous colors Hues adjacent on the color wheel; when placed together, they form pleasant harmonies because they are closely related. An example would be green, blue-green, and blue
- **Analytical Cubism** The first phase of Cubism. A collection of views from different angles fused into a balanced design with limited color.
- **anime** The Japanese style of animation. Compared to animation in the United States, it has a wider range of themes and subject matter and is enjoyed by all age groups.
- **aperture** (or **diaphragm)** An adjustable opening that controls the amount of light entering a camera.
- **applied arts** The useful media of the visual arts, such as architecture, design, and illustration.
- **applique** In quilting, fabric silhouettes cut out and stitched onto the background of another fabric.
- **appropriation** A method first used in the twentieth-century where imagery from other sources (photographs, past masterpieces) is taken and turned into a new work of art, sometimes with little or no alteration.
- **aquatint** An intaglio printmaking process that creates tonal areas. When powdered resin is applied to a metal plate and then heated, each particle becomes a dot that will resist acid. As with etched lines, the longer an area of aquatint is in the acid bath, the deeper the etch and the darker the tone in the print.

Arcade A covered walkway.

- **arbitrary colors** As opposed to naturalistic or realistic colors, colors that are the invention of the artist.
- **arch** A semicircular construction (usually of stone) that both supports the weight of a building and provides an opening. Used extensively during the Roman Empire, it allowed far wider spaces between columns than post-and-lintel construction. Also known as *rounded arch*.
- **art nouveau** A late nineteenth-century style utilized for furniture, architecture, interiors, and graphic design and characterized by elaborate, rhythmic, and organic decoration. It was the first modern international design style.
- **assemblage** Three-dimensional collages.
- **asymmetrical balance** An intuitive balance of visual weights that results in a more dynamic equilibrium than radial or symmetrical balance.
- **atmospheric perspective** A method of creating a sense of deep space in two-dimensional art based on the effect our atmosphere has on things seen at a distance. Distant forms are portrayed vaguer and closer to the color of the sky than near ones.
- **avant-garde** Literally the "advance guard;" the vanguard or leaders of new directions in the arts.
- **balance** Visually satisfying stability in a work of art. It is created by adjusting the placement of art elements in a field.
- **Baroque** The period in the seventeenth century that included art with dramatic use of light and dark and preferences for dynamic movement and theatrical effects, as well as intense naturalism and the inclusion of elements of ordinary life in religious scenes.
- **barrel vault** A rounded arch that when extended allowed for large and long public spaces in stone buildings, particularly cathedrals built during the Middle Ages.
- **Bauhaus** ("the house of building") A German school devoted to the cause of integrating the arts and modern technology and to transcending the boundaries among craft, design, and art. Founded in 1919 by the architect Walter Gropius, the school stressed a simple, modern, geometrical style.

- **bearing wall** An architectural construction using the walls themselves to support the weight of the roof and floors above.
- **binder** A glue-like substance that holds pigment together, the type of which determines the nature of the medium; for example, oil is the binder in oil paint. Used in all the colored media
- **Buddhism** A religion founded by Siddhartha Gautama, a prince from Nepal who lived in the sixth century BCE. Through the revelation that all life is an illusion and that the only way to escape pain is to renounce all desires, he attained **nirvana** and became the Buddha.
- **Byzantine** The eastern Roman Empire founded by Constantine. Also an art style of the civilization centered in Constantinople (now Istanbul) during the Middle Ages that was less naturalistic and more symbolic, stylized, flat, and decorative than before the fall of the Empire.
- **CAD (Computer-Aided Design)** A type of three-dimensional modeling software used by designers, engineers, and architects to create models for manufacturing and architecture. The program pictures the objects or buildings in three-dimensions, allowing the viewer to see them from many angles.
- camera obscura Literally meaning "dark room," initially a room-sized camera. By preventing all light from entering a room and then cutting a small hole in a shade over a window, a person could project an inverted image of the outside onto the opposite wall. By the 1700s, a table model of the camera obscura with lens and mirror became available, providing a right-side-up projected image on a screen that artists could use for tracing.
- **capital** The crown of an architectural column.
- **cartoon** A preparatory drawing for larger work, such as tapestries or murals.
- **casting** A process that makes one or several lasting copies of sculpture. Often the casts are made of bronze, though other metals or plaster may be used.
- **ceramics** Objects made from clay fired in a kiln for lasting hardness and strength.

- **chiaroscuro** A technique in drawing and painting where a dramatic contrast between light and dark areas creates a convincing illusion of three-dimensional forms. The Italian Baroque painter Michelangelo da Caravaggio is noted for using this technique.
- Classical Age The flourishing of Greek culture during the fourth and fifth centuries BCE. Classical Greek art expressed ideals of clarity, order, balance, proportion, harmony, and unity.
- **Classicism** A seventeenth-century movement that, inspired by the Classical art of Greece and Rome, taught that the highest aim of a work of art is to represent noble and serious thoughts. It called for a logical, orderly art with great themes so as to raise viewers up by appealing to their reason, not to their base emotions.
- **collage** The combination of cut-and-pasted paper, photographs, and other materials on a two-dimensional surface.
- **colonnade** A row of columns, usually supporting a roof.
- **Color-Field Painting** A kind of Abstract Expressionism characterized by large areas of color that are more dominant than any particular shape.
- **color wheel** Primary and secondary colors arranged in a circle. The primaries are placed equidistant from each other, with their secondary mixtures between them.
- **complementary colors** Colors that are directly across from each other on the color wheel, such as red and green. When placed together, they accentuate each other's intensity. Considered opposites, or *complements*.
- **conte crayon** A versatile drawing crayon developed in the late 1700s. It comes in a variety of degrees of hardness and can be used to create both subtle tones and dense blacks.
- **contour lines** Lines that describe the edge of a form, sometimes emphasized by changes in weight or width.
- **cool colors** The family of colors based on blue, purple, and green; colors that are associated with calm, order, the sky, and the ocean. They tend to recede away from the viewer.

- **Counter-Reformation** The Roman Catholic church's attempt to combat the Protestant **Reformation** of the sixteenth century. As part of this campaign, the church supported art that would entertain and rouse the faithful.
- **crafts** Traditionally, everyday, useful objects, that were handcrafted. Today, includes non-functional handcrafted objects in **ceramics**, glass, wood, metal, fiber, and other media.
- **crayon** A colored drawing medium with a waxy or oily binder that adheres to paper; does not require fixative.
- **cross-hatching** A drawing technique used to make forms appear three-dimensional. A series of parallel lines cross in a net-like fashion, describing the contours of a surface.
- nization of space developed by Pablo Picasso and Georges Braque in the early twentieth century. Built from a collection of observations, objects are seen from several angles simultaneously. Each part is equal in importance—there is no conventional foreground and background. The result is a significantly shallower space compared to linear perspective, as well as a less naturalistic appearance.
- Dada A meaningless term for an international art movement that began during World War I. Dada manifestos called for the destruction of all values—the end of art, morality, and society. This "anti-art," which took the form of bizarre performances and exhibition of found objects, or "ready-mades," was an effort to evolve a new way of thinking, feeling, and seeing.
- daguerreotype The first permanent photographic image, invented by Louis-Jacques-Mande Daguerre in 1839, utilizing silver foil made light sensitive with chemicals. After the foil was exposed to light in a camera, the image was made permanent by bathing in a salt solution.
- **deductive reasoning** The medieval scientific approach to explaining natural phenomena using accepted general rules. Compare to **inductive reasoning.**
- **design** The organization of visual elements into a composition that is visually satisfying.

- Die Brucke Literally "the Bridge," a group of German Expressionist artists led by Ernst Kirchner in the early 1900s. By expressing emotions honestly and directly, they hoped to encourage others to abandon the stale hypocritical attitudes of their elders. Clashing hues, strong lines, and aggressive spirit typified their work.
- **digital arts** (or **digital media**) The art forms created with the aid of computer technology.
- **digitize** To translate two-dimensional images (with scanners) and three-dimensional objects (with video cameras) into numbers that a computer can read so the images can appear on the computer's screen.
- digitizing or graphics tablet A flat, pressuresensitive input device used by digital artists as an alternative to a mouse. Artists use a penshaped stylus to draw directly on the tablet, which can not only sense where lines are being drawn but also the tilt of the pen and how much pressure is being applied.
- **Earth Art** Large-scale environmental sculpture outside of a gallery or museum; interacts directly with nature.
- **edition** The limited number of prints made directly from an image created by an artist on a block, plate, stone, or screen. Once the last print of an edition is "pulled," the block, plate, or other source is destroyed.
- egg tempera See tempera.
- **elevation** An architectural drawing that shows front and side views of a planned structure on a vertical plane.
- engraving The oldest form of intaglio printmaking, developed in Europe during the 1400s.

 Cuts and scratches dug with tools into a metal plate are filled with ink and print directly onto paper as lines.
- **Enlightenment** An intellectual movement that began in England and spread to France, then spread throughout Europe by the end of the eighteenth century. Great scientists and mathematicians stressed the value of rationality over faith and embraced the idea of progress.
- environment See installation.

- etching An intaglio process using acids rather than tools to cut the metal plate. An acid-resistant wax coating, or ground, is applied to the plate. An image is made by cutting through the ground. Then the plate is put in a tray of acid that "bites" into the metal where the wax ground was removed. After the plate is washed with water, it is inked and printed just like an engraving. Lines can be made lighter or darker by the amount of time the plate is in acid.
- **existentialism** A post-World War II philosophy that began in France. It declares that all people are essentially alone, that there is no God in the universe. Each one must face the ultimate meaninglessness of the universe and decide independently how to live one's own life.
- **Expressionism** A Modern Art movement that went beyond an imitation of the world toward an intense re-creation of feeling. Making inner feelings (as dark and deep as they may be) visible was generally achieved with powerful (often clashing) colors and vivid contrasts of light and dark.
- **facade** The outer side of an architectural structure; usually refers to the front of a building.
- **Fauves** Literally the "wild beasts," a group of French artists led by Henri Matisse in the early 1900s. They ignored perspective and used bright colors rreely as a source of pleasure.
- **figure-ground ambiguity** A design whose positive and negative forms are so balanced that it is unclear which part should be called *figure* and which should be called *ground*.
- **figure triangle** Common in Renaissance compositions, a triangular arrangement of elements, often figures.
- **fine arts** The visual arts customarily considered in Western civilization a "high" form of artistic production (in other words, not useful like the **applied arts**). They have traditionally included drawing, painting, and sculpture, but in the last two hundred years have also included outstanding examples of printmaking, photography, design, decorative arts, and crafts.
- **fixative** A spray of shellac or plastic polymer used in charcoal and pastel drawings to ensure a permanent bond to the paper.

- **flying buttress** In a gothic church, an exterior support for stability.
- **flying logo** Via computer animation, a kind of **logo** seen on television that appears to spin in three dimensions and come toward the viewer.
- **folk art** The work of unschooled artists, often working in rural areas. Can include painting, sculpture, and all the decorative arts, but usually created with less expensive materials.
- **foreshortening** In two-dimensional art, the apparent diminishing in size of forms as they seem to recede from the viewer.
- forged Metal shaped by heating.
- **found objects** Items from ordinary life that artists use in their works.
- frame or ballon-frame construction A supporting skeleton made of vertical and horizontal wooden supports nailed together; used in architectural constructions.
- **free-standing sculpture** Sculpture in the round that the viewer must circle to see completely.
- **fresco** A permanent wall-painting technique in use since ancient times. Pigment and water is brushed directly into fresh, wet plaster (fresco means "fresh" in Italian). As the plaster dries, the pigment is bound into it and literally becomes part of the wall itself.
- **Futurism** An early twentieth-century Italian Modern Art movement led by the poet Filippo Marinetti. A celebration of the age of the machine, it called for a complete and utter rejection of the art of the past.
- **genre** Ordinary and commonplace subject matter; scenes from everyday life.
- geometric shapes Enclosed spaces formed by straight lines or curved ones that progress evenly. Squares, rectangles, triangles, and circles are all examples of this kind of two-dimensional shape. Three-dimensional examples are the cube, box, pyramid, and sphere. Sometimes called hard-edged shapes.
- **gesso** A thick paint applied to prepare surfaces like wood or canvas for painting. It produces bright white surface impermeable to liquids.

- Traditionally, a thick paste of gypsum and animal glue, although today many artists replace the glue with an acrylic medium.
- glass blowing A craft that transforms hot, molten glass into a finished art object. The glass is picked up in a small spherical blob at the end of a long metal pipe, then blown into bubbles of various shapes, shaped with tools or by rolling on a hard surface, and removed from the pipe to cool slowly.
- glaze 1. Paint diluted and made transparent. Often built up in layers on top of underpainting to create the illusion of three-dimensional forms.2. In ceramics, a paint that melts into and fuses with clay while being baked in a kiln.
- **Gothic** Elaborately decorative medieval building style of the twelfth through fifteenth centuries, whose unique features were the **pointed arch**, the ribbed vault, exterior flying **buttresses**, high ceilings, and stained-glass windows.
- **gouache** An opaque watercolor made by adding chalk to pigment and gum arabic. Unlike watercolor, it can be applied more thickly, covers well, and permits changes.
- **graphic design** Once known as "commercial art," it is the manipulation of **typography** and images for advertisements, magazines, books, posters, packages, **logos**, and signs.
- **grazia** During the Renaissance period, art that was beautiful, graceful, and seemingly effortlessly achieved.
- **Greek orders** The three styles that originated in Ancient Greek architecture—Doric, Ionic, and Corinthian. They are most easily identified by their distinctive columns, **capitals** (or decorative tops). and bases.
- **groin vault** The intersection of two barrel vaults at right angles.
- **ground** 1. The visual plane where art elements (or figures) are organized. When elements are added to the ground, it becomes, in itself, a shape (called the negative form), and must be consciously dealt with. 2. The surface of a two-dimensional work of art. 3. A wax coating that resists acid; used in etching.

- Hellenistic Age An age that began with the reign of Alexander the Great (356–323 BCE) in Greece. During this time, Greek sculpture became more naturalistic and illusionistic, appealing less to the rational mind and more to the senses than the restrained works of the Classical period.
- **Hinduism** An ancient polytheistic religion native to India in which believers accept that humans experience an unending cycle of birth, life, death, and rebirth. *Karma* determines one's fate; the deeds of one lifetime influence one's status in the next.
- **horizon line** The same as the viewer's eye level, it is where the sky and the earth appear to meet. In linear perspective, it is where parallel lines converge.
- **Hudson River School** A group of nineteenth-century American Romantic painters. These artists saw in America an unspoiled land of great promise and painted many views of the Hudson Valley and other wilderness areas in the Northeast.
- **hue** The name of a color on the color wheel or in the spectrum. For example, violet and green are two different hues.
- **Humanism** The predominant philosophy of the Renaissance and catalyst for the period's great achievements. Its two main ingredients were the study of the ancient cultural achievements of the Greeks and Romans and respect for the individual.
- iconoclasm The destruction of religious imagery.
- **impasto** Thick paint that reveals the action of brushstrokes.
- Impressionism A Modern Art movement that began around 1870 in France. Based on the idea of conveying an immediate impression of a place and time of day. Impressionist painters worked outdoors, directly studying the moment's light and color. Their typical style achieved heightened color effects by placing colors side by side rather than mixing them.
- **Impressionists** A group of artists who met in cafes and studios and exhibited together in Paris from the 1870s to the end of the nineteenth century. While some, like

- Claude Monet, worked in the characteristic Impressionist style, others simply joined a rebellion against the dominant academic style of their time.
- **inductive reasoning** A medieval scientific approach where one observes phenomena directly and then uses the gathered information to develop general rules. Compare to **deductive reasoning.**
- **industrial design** The design of manufactured objects such as telephones, typewriters, and automobiles.
- **installation** A room-sized multimedia sculpture constructed in a gallery, museum, or public space. It is meant to surround the viewer with a unique artistic experience. Also known as an *environment*.
- **intaglio** A printmaking method: lines cut into the surface of a metal plate become receptacles for ink after the plate is inked and its surface wiped off. Damp paper and plate are then run through a press; the heavy pressure forces the paper into the ink-filled grooves, and the image is transferred.
- **intensity** The vividness of a particular hue.
- International Style The dominant twentieth-century architectural approach in Europe and the United States. The antithesis of the heavily ornamental style taught in nineteenth-century architectural academies, its buildings were flatroofed, made of modern materials (concrete, steel, and glass), and free of any superfluous decoration. Boxlike and practical, all spaces were designed for efficient organization.
- Islam Religion founded by the prophet Mohammed (570-632). The teachings of Mohammed are recorded in The Koran, which tells of the revelations of God through the angel Gabriel. The name "Islam" means "submission to the will of God."
- **Japonisme** The love of all things Japanese, a wave that swept over cultured Western society in the late nineteenth century.
- **juxtaposition** A technique invented by the Dadaists where unrelated objects are taken out of their normal context and joined together, producing a new unique object.

- **kiln** An oven used for drying and baking clay sculptures or ceramics.
- **kinetic sculpture** Sculpture with moving parts.
- **lens** In cameras, the clear, rounded glass or plastic that focuses the light onto the film.
- **linear perspective** The principal means of creating the illusion of the third dimension or depth in Western two-dimensional art since the Renaissance. All parallel lines appear to converge at points in the distance, called **vanishing points**. Forms that seem closer appear larger than those meant to be farther from the viewer. See also **one-point perspective**, **foreshortening**.
- **linear style** A Neoclassicist approach; typically paintings drawn with sharp outlines, clearly defined forms, and relatively solid areas of color.
- **lithography** A printmaking process where images are drawn or painted directly in grease on a flat stone or metal plate. After the surface is chemically treated and moistened with water, ink will only adhere where there is grease. Wax crayons, soap, and black pigment with *tusche*, a greasy liquid that can be applied with a brush or sprayed on, are the most common materials used to make the images.
- **local color** The general color of anything we see, without considering the effect of lighting or adjacent colors.
- **logo** A symbol or trademark of an organization that is meant to be instantly recognizable.
- **loom** A machine for weaving fibers into cloth.
- **lost wax method** A method, in a series of steps, of using molds to cast hollow metal sculpture or jewelry.
- **mandala** In Buddhist art, an intricate, geometrical design of deities depicted in concentric circles that represent the cosmos.
- manga Originally, nineteenth-century printed sketchbooks by Japanese artists that illustrated everyday life, often in a humorous way. Today, it refers to Japanese comic books that are enjoyed by readers of all ages.
- **Mannerism** A sixteenth-century Italian art movement that was a reaction to Renaissance ideals.

- Mannerist artists used distortion to demonstrate their inventiveness. Their highest aim was elegance.
- **maquette** A sculptural model in clay or wax of a planned larger work or cast work.
- **matte** A dull, nonreflective finish as opposed to a glossy finish.
- **media, medium** Artists' materials, such as oil paint or clay.
- **metalpoint** Drawings with pure, precise lines made by a thin metal wire in a holder; the wire is usually silver, but other metals including lead have been used.
- **mihrab** A niche for prayer in a **mosque**, oriented to face in the direction of Mecca.
- **minaret** A slender tower on the exterior of Islamic buildings.
- **Minimalism** An American art movement that began in the 1960s. Art is stripped down to the essentials; paintings and sculptures are self-sufficient and have no subject matter, content, or meaning beyond their presence as objects in space.
- mixed media A method first used in the twentiethcentury that mixes materials (manufactured, natural "found objects," as well as conventional art media), often using them in unusual ways, without respect for the traditional borders between two- and three-dimensional media.
- **mobile** A hanging kinetic sculpture, originated by Alexander Calder in the twentieth century, whose parts are moved by air currents.
- **monotype** A one-of-a-kind print made by applying ink or paint directly to a metal plate and then running it through a press with paper. It can also be made without the press by rubbing the back of the paper.
- **morphing** A computer-aided transformation where one image gradually becomes another.
- **mosaic** Picture made of tiles of colored stone, ceramic, or glass.
- mosque An Islamic place of worship.
- **naturalistic** Art that is realistic. For example, animals are drawn as if they were alive.

nave The large, central space in a medieval church.

negative form The shape of the space or ground around art elements.

National Treasures In Japan, a system that designates works of art as vitally important to the national heritage because of their historic and aesthetic significance. National Treasures can range from huge statues to fragile decorated boxes, and cannot be sold or taken out of the country. Even accomplished living artists can be given the official title of National Treasure.

Neoclassicism A reaction to Rococo art and the visual expression of the ideals of the Enlightenment of the eighteenth and nineteenth centuries. Its characteristics include clarity of line, color, and form. Its artists sought to create universal moral lessons that would educate and improve the viewer.

Neoexpressionism An international revival of Expressionist methods that began in the 1970s. Combines vigorous paint strokes with emotion-laden figurative imagery.

neutral colors White, black, and gray. Added to colors, they make tints and shades, changing the values but not the hue.

nirvana In Buddhism, a state of eternal bliss.

nonobjective shapes See nonrepresentational shapes.

nonrepresentational shapes Shapes that are not meant to refer to anything we can see in the real world. They are sometimes called *nonobjective* or *abstract*. These shapes can be either organic (soft-edged) or geometrical (hard-edged).

oculus "Eye"; round opening or window at the top of a dome.

one-point perspective A system of linear perspective invented by the Renaissance artist Filippo Brunelleschi. All parallel lines appear to converge at one point in the distance, the *vanishing point*, which is exactly on the horizon line. As in all linear perspective, the sizes of objects shrink as they increase in distance from the viewer.

Op Art A nonrepresentational style, introduced in the 1960s, that explored optical illusions.

organic shapes Enclosed spaces formed by uneven curves. They are sometimes called **naturalistic,** biomorphic, or soft-edged. Examples are shapes that look like amoebas or treetops.

Orientalism A fascination with or the study of Middle Eastern and Asian art and culture. A taste for exoticism that swept Europe and the United States in the nineteenth century; it viewed the peoples, history, and culture of the Middle East and Asia as "other"—the mysterious opposite of Western civilization.

painterly style An approach to painting promoted by the nineteenth-century Romantics, utilizing broad strokes, indistinct outlines between shapes, and colors blended into each other. It is a style intended to reach viewers' emotions rather than their minds.

pastels Colored chalks in sticks that are a combination of loose dry pigment and a **binder** of paste or methylcellulose.

Pax Romanus Roman peace during the reign of Augustus, when citizens could travel safely anywhere within the Roman Empire.

performance art Contemporary events designed to be ephemeral, lasting only in memory.

perspective An architectural drawing that gives a three-dimensional impression of a new building in its setting.

photomontage The imaginative combination of more than one photographic image.

photorealism See Superrealism.

piazza Large courtyard.

picture plane A flat two-dimensional surface within which art elements are organized.

plastic Moldable material, like wet clay, rather than rigid.

pointed arch A Gothic arch that allowed larger openings in the outer wall and higher ceilings in the interior than the Roman rounded arch.

pointillism The Post impressionistic style developed by Georges Seurat. By placing small spots of pure color side by side, Seurat let the viewer's eye optically mix the colors and thereby increase their luminosity.

- **Pop Art** An American and English art movement of the 1960s that celebrated the commodities and celebrities of the time.
- **porcelain** A type of **ceramic** developed in China. By baking clay at a high temperature it is transformed into a translucent material of glasslike hardness, sometimes known as "china."
- **positive form** The shape of an art element.
- **Postimpressionism** Separate expressions of dissatisfaction with Impressionism at the end of the nineteenth century by artists who had initially worked in that style. The most important figures of this new movement were Georges Seurat, Paul Gauguin, Vincent van Gogh, and Paul Cezanne.
- **post-and-lintel** A form of architectural construction in which posts or columns support horizontal lintels (cross beams).
- Post-Modern Art A contemporary movement that began in the 1980s. The dominant trends of Modern Art—a rejection of the past and of decorative elements and a steady movement towards nonrepresentational images—are reversed. Post-Modern Artists are interested in rediscovering the past, not rejecting it, and see history as a vast menu from which to select.
- **primary colors** Red, yellow, and blue, the three colors that cannot be made from any others, and that are the sources for all other colors.
- **proportion** The relative sizes of the parts of an object to each other.
- **quill** Pens made from bird feathers, most commonly goose. Variation in the pressure applied to the pen will smoothly change a line's width. Popular since the medieval period.
- **radial balance** All elements revolve around a central point.
- **raku** Hand-shaped Japanese ceramics associated with the tea ceremony. Irregular and asymmetrical, with glazes thick and rough, their imperfection is prized as a mark of mastery.
- **Realism** A nineteenth-century movement that rejected the idealized historical and mythological subjects of academic Neoclassicism; instead it focused on unembellished ordinary contemporary life as the source of truth and meaning.

- **Reformation** A rebellion led by Martin Luther against the Roman Catholic church in the sixteenth century resulting in the creation of Protestantism.
- **registration** In color prints, the proper alignment of each color with the other inked colors.

reinforced concrete (or ferroconcrete)

Concrete reinforced with thin iron rods to provide added strength. It enables architects to design structures with dramatic shapes.

- relief printmaking A method of printmaking where the negative spaces of a design are cut away, leaving the positive areas raised. The print's marks are made from inking what is left in "relief" on the block. Woodcuts, linoleum cuts, and rubber stamps fall into this category.
- **relief sculpture** A sculptural image that projects from a flat, two-dimensional background. The back of a relief sculpture is not meant to be seen; the entire design can be understood from a frontal view.
- Renaissance Meaning "rebirth," a period famous for art and architecture and generally considered to mark the beginning of the modern world. Spanning the fourteenth to sixteenth centuries in Europe, it was marked by renewed interest in Classical culture as well as the development of capitalism, the rise of the nation-state, scientific investigation, and individualism. Also known as the "Age of Exploration."
- **rendering** 1. A synonym for drawing. 2. In 3D computer design, modeling, or animation, the final stage when all objects, backgrounds, lights, shadows, reflections, special effects, and movements in a scene are generated by the computer.
- **rhythm** Repetition of similar shapes, as in *patterns*.
- **rock art** Painting on and carving in rock walls. An art form for tens of thousands of years, it can be found in North America, Asia, Australia, and all across Africa.
- **Rococo** An eighteenth-century lighthearted and decorative style of art whose subject matter is typically about lovers. It was a reaction to the formality of Classicism.

- **Romanesque** Medieval building style of the ninth through twelfth centuries based on the Roman round arch. Heavy stone geometric buildings were supported by thick walls with few windows and dark interiors.
- **Romanticism** A nineteenth-century reaction to **Neoclassicism**, by rejecting logic and order and looking for the inner truth of intuition and passions. Romantic artists admired the untamed power of nature and used a painterly style.
- **rotunda** A completely round building or a circular interior with a dome.
- **Salon** An annual exhibition in Paris, begun in 1737, of art chosen by members of the French Academy. It was the only important public exhibition available to artists in the midnineteenth century.
- **saturated colors** Colors that have a high level of intensity.
- **scale** The relative size between an object and a constant, usually the size of the average person.
- **secondary colors** Orange, green, and purple, created by mixing two primary colors.
- **secondary symbolism** Common in Medieval and Northern Renaissance art, where details have additional meanings, such as a white lily in a vase representing the Virgin Mary.
- **serpentinata** In Mannerism, the most elegant pose for a body—when the limbs and torso resembled the letter "S." It refers to the twisting of a snake.
- **sfumato lighting** In Italian, "the soft mist of a fountain." Soft lighting in Renaissance paintings originally used by Leonardo da Vinci. It makes both edges and details unclear. The lack of definite edges forces viewers to use their imagination, making portraits like the *Mona Lisa* seem more lifelike.
- **shades** Hues that have been darkened by the neutral color black. Navy blue is a very dark shade of blue.
- **shutter** The part of the camera that is triggered by the photographer and controls the time of the exposure.

- silkscreen (or serigraphy) An inexpensive method of producing very large editions of prints. A stencil is attached to silk tightly stretched over a wooden frame. Paper or cloth is placed underneath the screen and ink is spread across the screen with a rubber blade or squeegee. The areas of silk not covered with a stencil let the ink come through and print onto the medium.
- **simultaneous contrast** The effect of two colors meeting. Differences between them are accentuated; their similarities are not apparent.
- steel frame (or cage construction) A form of architectural construction developed in the 1890s using a steel interior skeleton that resembles a bird cage. Used today for building skyscrapers. Its facade is often a simple "skin" of glass.
- **stigmata** Bloody signs of the nails that held Christ to the cross.
- De Stijl ("the Style") Early twentieth-century
 Dutch artists who believed a pure universal
 style in art and architecture could be the solution to humankind's misery. Followers of Piet
 Mondrian, they designed furniture and buildings using flat geometric areas filled with primary colors.
- **stoicism** A Greek philosophy that encouraged dignity, rational thought, and control over one's emotions.
- **stupa** A Buddhist religious shrine in the shape of a mound. Pilgrims walk around it, symbolizing the Path of Life around the World Mountain. The walking is a form of meditation and worship.
- **subtractive sculpture** As opposed to **additive**, sculpture carved out of materials such as wood or stone.
- **Superrealism** (or **photorealism**) A movement that began in the 1970s that in two dimensions, re-creates the look of photographs. In three dimensions, casting is often used to achieve the utmost fidelity to reality.
- **Surrealism** An art movement begun in the 1920s that depicted dreams and visions of the irrational unconscious and was inspired by Sigmund Freud's theories.

- **symmetrical balance** Sometimes known as *bilateral symmetry*, a balance where there is general equivalence of shape and position on opposite sides of a central axis; if folded in half, the forms would match.
- **Synthetic Cubism** The second phase of Cubism, where more colorful and playful visual symbols replaced the limited colors and angular planes of analytical cubism.
- **tempera** A painting medium in which pigments are mixed with egg yolks (sometimes called **egg tempera**).
- **tenebroso** Literally, the "dark manner." A technique of the followers of Michelangelo da Caravaggio.
- **terra-cotta** Clay baked in a kiln and hardened to a rich red-earth tone.
- **texture mapping** In computer art, the wrapping of a texture around a wire-grid form drawn by an artist to create a realistic or imaginative surface.
- **three-dimensional space** The kind of space we actually live in. It contains objects that can be viewed from all sides, objects that have height, width, and depth. Sculpture and architecture are examples of three-dimensional art forms.
- **throwing** The action of a potter using a wheel to build a round vessel. A lump of clay is lifted and shaped by hand as the wheel turns.
- **tints** Hues that have been lightened by the neutral color white. Pink is a pale tint of red.
- **transept** In a medieval church, the short rectangular space that ran perpendicular to the **nave**, forming the Latin-cross floor plan.
- **trompe l'oeil** Art that fools our eyes into believing that what we see is real.
- **trumeau** The central pillar of the main doorway of a church.
- **two-dimensional space** Flat space that can only be viewed from one side. Anything that exists in this space will have height and width but no depth. However, two-dimensional art forms often create the *illusion* of depth. Drawing and painting are examples of two-dimensional art forms.

- **typography** The manipulation and selection of styles and sizes of letters (*type*) in graphic design.
- **Ukiyo-e** Literally "pictures of the floating world"; Japanese woodcut prints that depicted brothels, the theater, and scenes of travelers and ordinary life among the middle class of Japan. The style and subjects of these prints influenced the development of Impressionism and Postimpressionism.
- **underpainting** Painting done as a foundation for subsequent transparent glazes. Usually establishes basic composition and tonal relationships.
- unity A sense of coherence or wholeness in a work of art. Unity alone is unlikely to sustain the interest of a viewer. It must be balanced with variety.
- **value** The relative lightness and darkness of a color.
- **vanishing point** In linear perspective, a point where parallel lines appear to converge on the horizon, like railroad tracks meeting at a point in the distance.
- **vernacular architecture** The architecture of ordinary buildings built in a traditional, local style, without the assistance of a professional architect.
- **video art** Art works that are created with video cameras or are constructed with video monitors.
- **visual weight** The relative importance of an element in a picture plane. Visual weight is dependent on the position, color, size, shape, or texture of the element.
- **volume** A three-dimensional shape, although sometimes implied, such as a drawing of a vase.
- **volute** A decorative spiral on a column.
- warm colors The family of colors based on yellow, orange, and red; colors that are associated with extreme emotions, chaos, fire, and the sun. They tend to advance towards the viewer.
- warp In weaving, vertical parallel threads arranged in a **loom**.
- **wash** Diluted ink applied with a brush to add tonal values to a drawing.

watercolor Transparent paint that is a quick-drying combination of pigment and gum arabic. Diluted with water, it is usually applied to paper.

weft (or **woof**) In weaving, horizontal parallel threads passed at right angles to the **warp** and interlaced with them in a **loom**.

wood engraving A relief process similar to woodcut, but that uses the endgrain on blocks of hard wood. The endgrain's density permits very fine, precise lines to be created, and, compared to woodcuts, many more prints can be made before the block begins to deteriorate.

woodcut A type of **relief printmaking** made by carving directly into a smooth piece of wood and removing any parts of the surface not meant to be part of the image.

wrought Metal shaped by hammering.

PHOTO CREDITS

CHAPTER I ©Réunion des Musées Nationaux (R.G. Ojeda)/ Art Resource, NY ©Roger-Viollet, Paris, Private Collection/The 1-2 Bridgeman Art Library ©Réunion des Musées Nationaux/Art 1-3 Resource, NY 1-4 ©Réunion des Musées Nationaux/Art Resource, NY 1-5 ©Alinari Archives/Art Resource ©Archivo Iconografico, S.A./CORBIS 1-6 also Chapter 13 map 1-7 ©Robert Harding Picture Library Ltd/Alamy 1-8 ©Erich Lessing/Art Resource, NY also Chapter 12 map 1-9 Jean Vertut also Chapter 12 map 1-10 Jean Vertut ©Yale University Art Gallery/Art Resource, NY 1-11 1-12 ©CuboImages srl/Alamy ©Werner Foreman/Topham/The Image Works 1-13 1-14 ©Malcolm Kirk 1-15 ©Dennis Cox/Alamy 1-16 ©Art Resource, NY ©Erich Lessing /Art Resource, NY 1-171-18 ©Scala/Art Resource, NY also Chapter 15 timeline and Chapter 14 map Imperial War Museum 1-19 Freer Gallery of Art, Smithsonian Institution, Washington, D.C. F1942.15a also Chapter 19 timeline University of California, Berkeley Art Museum; purchased with the aid of funds from the National Endowment for the Arts (selected by The Committee for the Acquisition of Afro-American Art). Photograph courtesy of Michael Rosenfeld Gallery, LLC, New York, NY. Photograph by Joshua Nefsky. 1-22 Private Collection, ©DACS / Photo ©Boltin Picture Library/The Bridgeman Art Library. ©2008 Artists Rights Society (ARS), New York/ADAGP, Paris/Succession Marcel Duchamp. 1-23 ©Bill Helsel/Alamy

also Chapter 20 timeline

1-24 1-25 ©Rob Crandall/The Image Works

©Ansel Adams Publishing Rights Trust/CORBIS

1-26 ©1978 The Imogen Cunningham Trust Photo by Stephen White, Pékin Fine Arts Co. Ltd. 1-27 ©Ian Goodrick/Alamy 1-28 The Gates, Project for Central Park, New York 1-29 City. Photo: Wolfgang Volz. @Christo and Jeanne-Claude 2003 The Gates, Central Park, New York City, 1979-1-30 2005. Photo: Wolfgang Volz. ©Christo and Jeanne-Claude 2005 also Chapter 20 timeline 1-31 Private Collection, Courtesy of David Tunkl 1-32 Solomon R. Guggenheim Museum, New York, Gift, Solomon R. Guggenheim, 1938. Accession #38.508. ©2008 Artists Rights Society (ARS), New York/VG Bild-Kunst, Bonn. ©Digital Image ©The Museum of Modern Art/Licensed by SCALA/Art Resource, NY. ©2008 Artists Rights Society (ARS), New York/ADAGP, Paris. Art Image copyright ©The Metropolitan 1-34 Museum of Art/Art Resource, NY also Chapter 18 timeline 1-35 Acquired 1949, The Phillips Collection, Washington, D.C. ©1973 (renewed 2001) Grandma Moses Properties Co., New York. Courtesy of Museum of Northern Arizona 1-36 Photo Archives, E3176. (Negative number 81C.7) Photographer, Mark Middleton. 1-37 Courtesy of The Coca-Cola Company Courtesy Reserve Bank of New Zealand. 1-38 Courtesy of the artist, Herb Kawainui Kane ©Scala/Art Resource, NY 1-39 also Chapter 17 timeline © Geoffrey Clements/CORBIS. ©2008 The 1-40 Willem de Kooning Foundation/Artists Rights Society (ARS), New York. also Chapter 19 timeline 1-41 ©Scala/Art Resource, NY © Geoffrey Clements/CORBIS. ©2008 The 1-42 Willem de Kooning Foundation/Artists Rights Society (ARS), New York. ©Gjon Mili, Time & Life Pictures/Getty Images. 1-43

©The Andy Warhol Foundation, Inc./Art

(ARS), New York.

Resource, NY. ©2008 Andy Warhol Founda-

tion for the Visual Arts/Artists Rights Society

1-44

- 1 45©Réunion des Musées Nationaux/Art Resource, NY
- 1-46 ©Tony Oursler
- 1-47 Courtesy Marianne Boesky Gallery, New York

CHAPTER 2

- Museum of Fine Arts, Boston. Zoe Oliver Sher-2-1 man Collection given in memory of Lillie Oliver Poor, 1938. 38.1838. Photograph ©2008 Museum of Fine Arts, Boston.
- ©Bildarchiv Preussischer Kulturbesitz/Art 2-2 Resource, NY
- 2-3 Library of Congress, Prints and Photographs Division
- ©Albright-Knox Art Gallery/CORBIS . ©2008 2-4 The Franz Kline Estate/Artists Rights Society (ARS), New York.

also Chapter 20 timeline

- 2-5 Solomon R. Guggenheim Museum, New York. Accession #65.1738. Photograph by David Heald ©The Solomon R. Guggenheim Foundation, New York. ©2008 Calder Foundation, New York/Artists Rights Society (ARS), New York.
- 2-8Digital Image ©The Museum of Modern Art/Licensed by SCALA/Art Resource, NY. ©2008 Estate of Pablo Picasso/Artists Rights Society (ARS), New York.
- 2-9 ©Arcaid/Alamy
- ©Cleveland Museum of Art, Leonard C. Hanna, Jr. Fund. 2002.29. Photo: Allan Finkelman. Art © Louise Bourgeois/Licensed by VAGA, New York, NY
- 2-11 ©Alinari/Art Resource, NY
- 2-12 ©Yale University Art Gallery/Art Resource, NY
- Solomon R. Guggenheim Museum, Panza Collection, Gift, 1991. 91.408. Photograph by Erika Barahona ©Solomon R. Guggenheim Foundation, New York. ©James Turrell
- 2-14 ©Robert Estall Photo Agency/Alamy. Reproduced by permission of the Henry Moore Foundation.
- 2-15 © SSPL/The Image Works
- © Erich Lessing/Art Resource, NY
- Courtesy Paula Cooper Gallery, New York 2-18
- 2-19 © Pat Behnke/Alamy
- 2-20 © guichaoua/Alamy
- 2-21 © Bildarchiv Preussischer Kulturbesitz (Elke Walford)/Art Resource, NY
- 2-25 Digital Image ©The Museum of Modern Art/Licensed by SCALA/Art Resource, NY. ©2008 Artists Rights Society (ARS), New York/ADAGP, Paris.

- 2-26 © Gift of Mrs Joseph B. Schlotman, The Detroit Institute of Arts, USA/The Bridgeman Art Library
- 2-27 © Alinari Archives/The Image Works. ©2008 Artists Rights Society (ARS), New York/ ADAGP, Paris. © 2008 Artists Rights Society (ARS), New York/ADAGP, Paris.

CHAPTER 3

- 3-1 Whitney Museum of American Art, New York. Purchase 96.53.4a-b ©Ellsworth Kelly.
- Courtesy Donald Young Gallery, Chicago. 3-2
- 3-3 © Paul Almasy/CORBIS
- 3-4 © Massimo Listri/CORBIS
- 3-6 © Scala/Art Resource, NY also Chapter 12 timeline and Chapter 12 map
- Image copyright ©The Metropolitan Museum 3-7 of Art/Art Resource, NY
- 3-8 © Scala/Art Resource, NY
- 3-9 © The Philadelphia Museum of Art/Art Resource, NY
- Courtesy of ACE Gallery Los Angeles. 3-10
- ©Lauros/Giraudon, Pantheon, Paris, France/ 3-11 The Bridgeman Art Library also Chapter 15 timeline
- 3-12 ©The Philadelphia Museum of Art/Art Resource, NY. ©2008 Georgia O'Keeffe Museum/Artists Rights Society (ARS), New York.
- ©Galleria dell' Accademia, Venice, Italy/The 3-13 Bridgeman Art Library
- Gift of Enid A. Haupt. 1977.47.7. Image ©2007 3-14 Board of Trustees, National Gallery of Art, Washington, DC. ©2008 Artists Rights Society (ARS), New York/ADAGP, Paris.
 - also Chapter 20 timeline ©Scala/Art Resource, NY
- 3-16 ©age fotostock/SuperStock also Chapter 13 timeline

3-15

- Courtesy the artist and Hauser & Wirth, 3-17 Zürich/London.
- Therrien, Robert, Under the Table, 1994, wood, 3-18 metal and enamel, 117 x 312 x 216 inches overall, The Broad Art Foundation, Santa Monica, CA. Photography: Douglas M. Parker Studio, Los Angeles. ©2008 Robert Therrien/ Artists Rights Society (ARS), New York.
- AP Images/Mario Cabrera. ©2008 Richard 3-19 Serra/Artists Rights Society (ARS), New York.
- Digital Image ©The Museum of Modern 3-20 Art/Licensed by SCALA/Art Resource, NY. ©2008 Artists Rights Society (ARS), New York/SOMAAP, Mexico City.
- 3-21 ©Giraudon, Louvre, Paris, France/The Bridgeman Art Library

- 3-22 ©Brooklyn Museum of Art, New York, USA, Gift of Anna Ferris/The Bridgeman Art Library
- 3-23 The Court of Gayumars(2005.1.165; M200) © Aga Khan Trust for Culture, Geneva also Chapter 14 timeline
- 3-24 ©Scala/Art Resource, NY
- 3-25 Solomon R. Guggenheim Museum, New York.
 Accession #54.1412-Georges Braque ©2008
 Artists Rights Society (ARS), New York/
 ADAGP, Paris. ©2008 Artists Rights Society
 (ARS), New York/ADAGP, Paris.
- 3-26 CArt Resource, NY. ©1961 M.C. Escher Foundation-Baarn-Holland. All rights reserved.

CHAPTER 4

- 4-1 ©Réunion des Musées Nationaux / Art Resource, NY
- 4-2 Harvard University Art Museums, Fogg Art
 Museum, Gift of Charles E. Dunlap, 1954.110
 Photo: Allan Macintyre ©President and
 Fellows of Harvard College
- 4-3 ©James Luciana
- 4-4 Image ©2005 Board of Trustees, National Gallery of Art, Washington DC Rosenwald Collection. ©2008Artist's Rights Society (ARS), New York/VG Bild-Kunst, Bonn
- 4-5 ©Burstein Collection/CORBIS also Chapter 16 timeline
- 4-6 Digital Image ©The Museum of Modern Art/ Licensed by SCALA/Art Resource, NY
- 4-7 The Metropolitan Museum of Art, New York, Robert Lehman Collection, 1975. (1975.1.862) Photograph ©1997 The Metropolitan Museum of Art
- 4-8 Rijksmuseum, Amsterdam
- 4-9 Museum of Fine Arts, Boston. Special Chinese and Japanese Fund, 15.907. Photograph ©2008 Museum of Fine Arts, Boston.
 - also Chapter 14 timeline
- 4-10 ©Réunion des Musées Nationaux/Art Resource, NY
- 4-11 Marian Goodman Gallery, New York
- 4-12 Image courtesy of Sikkema Jenkins & Co.
- 4-13 Digital Image ©The Museum of Modern
 Art/Licensed by SCALA/Art Resource, NY.
 Courtesy of Cai Studio.

CHAPTER 5

5-1 Digital Image ©The Museum of Modern Art/ Licensed by SCALA/Art Resource, NY. Art ©Jasper Johns/Licensed by VAGA, New York, NY

- 5-2 ©Erich Lessing/Art Resource, NY
- 5-3 San Francisco Art Institute, gift of William Gerstle. Photo: David Wakely.
- 5-4 Digital Image ©The Museum of Modern Art/Licensed by SCALA/Art Resource, NY. Copyright ©Andrew Wyeth.
- 5-5 ©Erich Lessing/Art Resource, NY
- 5-6 ©Clore Collection, Tate Gallery, London/Art Resource, NY
- 5-7 The Art Institute of Chicago (Mr. and Mrs. Lewis Larned Coburn Memorial Collection, 1954.183). Photography ©The Art Institute of Chicago.
- 5-8 Kronos Collection, New York.
- 5-9 ©The Detroit Institute of Arts, USA, Founders Society Purchase, Dr & Mrs Hilbert H.
 DeLawter Fund/The Bridgeman Art Library.
 Copyright ©Helen Frankenthaler.
- 5-10 ©Journal-Courier/Clayton Stalter/The Image Works
- 5-11 Hirshhorn Museum and Sculpture Garden, Smithsonian Institution. Photo: Lee Stalsworth. Art ©Romare Bearden Foundation/Licensed by VAGA, New York, NY
- 5-12 Courtesy Paula Cooper Gallery, New York
- 5-13 V&A Images/Victoria and Albert Museum, London. Art ©Vik Muniz/Licensed by VAGA, New York, NY

CHAPTER 6

- 6-2 ©British Museum/HIP/Art Resource, NY
- 6-3 ©Victoria & Albert Museum, London/Art Resource, NY
- 6-4 ©Mary Evans Picture Library/The Image Works
- 6-6 ©Scala/Art Resource, NY
- 6-7 ©Topham/The Image Works also Chapter 16 timeline
- 6-9 ©British Museum/HIP/Art Resource, NY
- 6-10 ©Worcester Art Museum, Massachusetts, USA/ The Bridgeman Art Library also Chapter 17 timeline
- 6-12 ©British Museum/HIP/Art Resource, NY
- 6-13 Digital Image ©The Museum of Modern Art/ Licensed by SCALA/Art Resource, NY also Chapter 17 timeline and Chapter 18 timeline
- 6-14 ©Private Collection/The Bridgeman Art Library. Courtesy of the artist.
- 6-16 Mary Boone Gallery, NY
- 6-17 Museum of Fine Arts Boston. Denman Waldo Ross Collection, 1909. 09.295. Photograph ©2008 Museum of Fine Arts, Boston.

- 6-18 ©Private Collection/The Bridgeman Art Library. Copyright ©David Hockney.
- 6-19 ©Kiki Smith, Courtesy PaceWildenstein, New York. Photography by Gregory Heins.

- 7-2 Conservatoire Nationale des Arts et Métiers, Paris.
- 7-3 ©NMPFT/SSPL/The Image Works
- 7-4 ©Private Collection, The Stapleton Collection/ The Bridgeman Art Library
- 7-6 ©Private Collection, The Stapleton Collection/ The Bridgeman Art Library
- 7-7 The Minneapolis Institute of Arts, The Kate and Hall J. Peterson Fund, Acc. #72.118.8
- 7-8 Copyright ©Henri Cartier-Bresson/ Magnum Photos
- 7-9 Library of Congress, Prints and Photographs
 Collection
 - also Chapter 19 timeline
- 7-10 ©NMeM/Royal Photographic Society Collection/SSPL/The Image Works. ©2008 Georgia O'Keeffe Museum/Artists Rights Society (ARS), New York.
 - also Chapter 18 timeline
- 7-11 ©Library of Congress, Washington D.C., USA/The Bridgeman Art Library. Permission Joanna T. Steichen.
- 7-12 Digital Image ©The Museum of Modern
 Art/Licensed by SCALA/Art Resource, NY.
 ©2008 Man Ray Trust/Artists Rights Society
 (ARS), New York.
 - also Chapter 19 timeline
- 7-13 Digital Image ©The Museum of Modern Art/ Licensed by SCALA/Art Resource, NY
- 7-14 ©Bildarchiv Preussischer Kulturbesitz/Art Resource, NY. ©2008 Artists Rights Society (ARS), New York/VG Bild-Kunst, Bonn. also Chapter 18 timeline
- 7-15 Copyright © 1984 The Estate of Robert Mapplethorpe.
- 7-16 ©Sebastiao Salgado/Contact Press Images
- 7-17 © 1980 Sandy Skoglund. also Chapter 20 timeline
- 7-18 Courtesy of the Artist and Metro Pictures
- 7-19 Courtesy of Jerry Uelsmann

CHAPTER 8

- 8-1 ©Image Select/Art Resource, NY
- 8-2 ©DACS/The Bridgeman Art Library. ©2008 Artists Rights Society (ARS), New York/ SIAE. Rome.
- 8-3 ©ArenaPal/Topham/The Image Works.
 ©2008 Salvador Dali, Gala-Salvador Dali
 Foundation/Artists Rights Society (ARS),
 New York.

- 8-4 Digital Image ©The Museum of Modern Art/ Licensed by SCALA/Art Resource, NY also Chapter 20 timeline
- 8-5 Bill Viola, The Crossing, 1996, Video/sound installation. Photo: Kira Perov
- 8-6 Bill Viola, The Crossing, 1996, Video/sound installation. Photo: Kira Perov
- 8-7 Collection Museum of Contemporary Art, Chicago. Courtesy the artist and Hauser & Wirth, Zürich/London.
- 8-8 Lincoln Laboratory, MIT, Roger Sudbury
- 8-9 Courtesy of A. Michael Noll
- 8-10 Courtesy of Maggie Taylor
- 8-11 Courtesy of Stephanie Syjuco
- 8-12 House Industries
- 8-13 Courtesy the artist and The Project, New York.
- 8-14 Copyright 1986 by Pixar. All rights reserved. "Luxo" is a trademark of Jac. Jacobson Industries.
 - also Chapter 20 timeline
- 8-15 ©Touhoku Shinsha/The Kobal Collection
- 8-16a Peter Edmunds, www.swarmsketch.com.
- 8-16b Peter Edmunds, Unclaimed Baggage, 05/12/2005, online collaborative drawing from www.swarmsketch.com.
- 8–17 bitforms gallery, nyc

- 9-1 ©Danny Lehman/CORBIS also Chapter 12 timeline and Chapter 12 map
- 9-2 ©Private Collection/The Bridgeman Art Library. Permission Joanna T. Steichen.
- 9-3 ©Erich Lessing/Art Resource, NY also Chapter 12 map
- 9-4 Metropolitan Museum of Art, Michael C. Rockefeller Memorial Collection, Gift of Nelson A. Rockefeller, 1965. (1987.412.309) Photograph ©1983 The Metropolitan Museum of Art
- also Chapter 15 timeline and Chapter 13 map
- 9-5 ©Alinari Archives/Art Resource, NY also Chapter 15 map
- 9-6 ©Alinari Archives/Art Resource, NY
- 9-7 Gift of the Collectors Committee, Photograph © 2001 Board of Trustees, National Gallery of Art, Washington. ©2008 Calder Foundation, New York/Artists Rights Society (ARS), New York.
- 9-8 Museum Jean Tinguely, photo by David Gahr. ©2008 Artists Rights Society (ARS), New York/ADAGP, Paris
- 9-9 ©2008 Artists Rights Society (ARS), New York VG Bild-Kunst, Bonn
- 9-10 Copyright: Laurie Anderson. Photograph: Perry Hoberman. Courtesy of Sean Kelly Gallery, New York

- 9-11 Courtesy of Scharf Studio, photography by Tseng Kwong Chi.
- 9-12 Art ©Estate of Robert Smithson/Licensed by VAGA, New York, NY
- 9-13 ©Scott T. Smith/CORBIS. Art ©Nancy Holt/ Licensed by VAGA, New York, NY
- 9-14 ©Robert Preston Photography/Alamy also Chapter 13 timeline
- 9-15 Hirshhorn Museum and Sculpture Garden, Smithsonian Institution. Photo: Lee Stalsworth
- 9-17 Image copyright ©The Metropolitan Museum of Art/Art Resource, NY
- 9-18 Image copyright ©The Metropolitan Museum of Art/Art Resource, NY
- 9-19 ©Jtb Photo Communications Inc./Photolibrary also Chapter 13 timeline
- 9-20 ©Scala/Art Resource, NY
- 9-21 Hirshhorn Museum and Sculpture Garden, Smithsonian Institution. Photo: Lee Stalsworth. Art ©Estate of David Smith/Licensed by VAGA, New York, NY also Chapter 19 timeline
- 9-22 Digital Image ©The Museum of Modern
 Art/Licensed by SCALA/Art Resource, NY.
 ©2008 Estate of Louise Nevelson/Artists
 Rights Society (ARS), New York.
- 9-23 Solomon R. Guggenheim Museum, New York.
 Purchased by exchange with funds contributed by Dakis Joannou and with a special International Director's Council fund in honor of Dakis Joannou, 2003. Accession #2003.79. Photograph by David Heald ©The Solomon R. Guggenheim Foundation, New York
- 9-24 Courtesy of the Artist and Metro Pictures
- 9-25 "A Cappella" by Patrick Dougherty, Villa Montalvo, Saratoga, CA, Photo by Ron Johnson.

- 10-1 ©2008 Frank Lloyd Wright Foundation, Scottsdale, AZ/Artists Rights Society (ARS), New York.
- 10-2 ©2008 Frank Lloyd Wright Foundation, Scottsdale, AZ/Artists Rights Society (ARS), New York
- 10-3 ©2008 Frank Lloyd Wright Foundation, Scottsdale, AZ/Artists Rights Society (ARS), New York.
- 10-4 ©age fotostock/SuperStock. ©2008 Frank Lloyd Wright Foundation, Scottsdale, AZ/Artists Rights Society (ARS), New York. also Chapter 19 timeline
- 10-5 © Yoram Lehman/Peter Arnold, Inc.
- 10-6 ©Erich Lessing/Art Resource, NY

- 10-7 ©Vanni/Art Resource, NY also Chapter 14 timeline
- 10-8 ©Wolfgang Kaehler/Alamy
- 10-9 ©Brian Brake/Photo Researchers, Inc.
- 10-10 ©Georg Gerster/Photo Researchers, Inc.
- 10-11 ©Vanni/Art Resource, NY
- 10-12 ©Borromeo/Art Resource, NY also Chapter 12 timeline and Chapter 12 map
- 10-14 Courtesy Saskia Ltd., ©Dr. Ron Wiedenhoeft
- 10-17 ©Cosmo Condina/Alamy also Chapter 13 map
- 10-20 Index/Artphoto also Chapter 12 timeline
- 10-22 ©La Madeleine, Vezelay, France/The Bridgeman Art Library
- 10-23 ©Anthony Scibilia/Art Resource, NY
- 10-26 ©Scala/Art Resource, NY also Chapter 12 timeline and Chapter 12 map
- 10-27 ©Peter Aaron/Esto
- 10-28a ©Réunion des Musées Nationaux/Art Resource, NY
- 10-28b ©Réunion des Musées Nationaux/Art Resource, NY
- 10-30 ©Rob Kavanagh/Alamy also Chapter 19 timeline
- 10-31 Ezra Stoller ©Esto
- 10-32 ©VIEW Pictures Ltd (Nathan Willock)/Alamy
- 10-33 ©David Burton/Alamy
- 10-34 ©Vincenzo Lombardo/Getty Images also Chapter 14 map
- 10-36 ©DeA Picture Library/Getty Images
- 10-37 ©Alinari/Art Resource, NY
- 10-38 ©Robert Llewellyn/SuperStock also Chapter 16 timeline
- 10-39 Robert Lautman Photography Collection, Courtesy National Building Museum
- 10-40 ©William S. Helsel/Getty Images/Stone
- 10-41 From Urbanisme, Cres, Paris, 1925, page 301. ©2008 Artists Rights Society (ARS), New York/ADAGP, Paris/FLC.
- 10-42 Courtesy Zaha Hadid Architects also Chapter 20 timeline
- 10-43 Diller Scofidio + Renfro

CHAPTER II

- 11-1 ©Réunion des Musées Nationaux/Art Resource, NY
 - also Chapter 13 timeline and Chapter 13 map ©National Museum of Women in the Arts,
- 11-2 ©National Museum of Women in the Arts, Washington, DC. Gift of Wallace and Wilhelmina Hollady
- 11-3 ©Scala/Art Resource, NY also Chapter 12 timeline
- 11-4 ©British Museum/HIP/Art Resource, NY
- 11-5 ©Topham/The Image Works also Chapter 14 timeline

- 11-6 ©Smithsonian American Art Museum, Washington, DC/Art Resource, NY
 - also Chapter 17 timeline
- 11-7Digital Image ©The Museum of Modern Art/ Licensed by SCALA/Art Resource, NY
- ©Bildarchiv Preussischer Kulturbesitz/Art 11-8 Resource, NY also Chapter 13 map
- ©Topham/The Image Works
- 11-10 ©Victoria & Albert Museum, London/Art Resource, NY
- 11-11 ©Museum of Fine Arts, Boston, Massachusetts, USA, Bequest of Maxim Karolik/The Bridgeman Art Library
- 11-12 Image copyright ©The Metropolitan Museum of Art/Art Resource, NY
- 11-13 Photo: © schoppleinstudio.com. Courtesy of the Voulkos & Co. Catalogue Project, www. voulkos.com
- 11-14 San Francisco Museum of Modern Art (gift of the Modern Art Council). Art ©Estate of Robert Arneson/Licensed by VAGA, New York, NY
- 11-15 Courtesy of the artist.
- 11-16 ©Indianapolis Museum of Art, USA, Gift of Marilyn and Eugene Glick/The Bridgeman Art Library
- 11-17 Copyright ©Magdalena Abakanowicz. Courtesy of the Marlborough Gallery, New York.
- 11-18 ©Smithsonian American Art Museum, Washington, DC/Art Resource, NY
- 11-19 ©Smithsonian American Art Museum, Washington, DC/Art Resource, NY
- 11-20 Private Collection. Courtesy Tibor de Nagy Gallery, New York
- 11-21 ©Ellen McKnight/Alamy
- 11-22 ©Myra Mimlitsch-Gray. Courtesy of Rotasa Collection Trust.
- 11-23 Courtesy of TAI Gallery, Santa Fe, New Mexico. Photo by Mochizuki Akira, Japan.
- 11-24 ©Victoria & Albert Museum, London/Art Resource, NY
- 11-25 Designed by Milton Glaser
- 11-26 ©Private Collection/The Bridgeman Art Library also Chapter 19 timeline
- 11-27 Digital Image ©The Museum of Modern Art/Licensed by SCALA/Art Resource, NY. ©2008 Artists Rights Society (ARS), New York/VG Bild-Kunst, Bonn.
- 11-28 ©Arcaid/Alamy
- 11-29 ©Erich Lessing/Art Resource, NY also Chapter 18 timeline
- 11-30 Courtesy of Knoll International also Chapter 20 timeline
- 11-31 ©Glyn Thomas/Alamy

- 11-32 ©Art Kowalsky/Alamy also Chapter 15 timeline and Chapter 15 map
- 11-33 ©2008 The Isamu Noguchi Foundation and Garden Museum, New York/Artists Rights Society (ARS), New York.

- 12-1 ©Gary Cook/Alamy also Chapter 12 timeline and Chapter 12 map
- ©Erich Lessing/Art Resource, NY 12-2
- 12 3©Araldo de Luca also Chapter 12 timeline
- 12-4©Bildarchiv Preussischer Kulturbesitz/Art Resource, NY
 - also Chapter 12 timeline and Chapter 12 map
- Egyptian National Museum, Cairo, Egypt, 12-5Photo ©Boltin Picture Library/The Bridgeman Art Library
- 12-6 ©Carmen Redondo/CORBIS
- 12-7©Giraudon/Art Resource, NY
- 12 8©Erich Lessing/Art Resource, NY
- 12-9 ©View Stock/Alamy
 - also Chapter 12 timeline and Chapter 12 map
- 12-10 Image copyright ©The Metropolitan Museum of Art/Art Resource, NY
- 12-11 Cella rendering from The Parthenon Project, www.debevec.org/Parthenon, ©2004 University of Southern California
- 12-13 ©World Religions Photo Library/Alamy also Chapter 12 map
- 12-14 ©Christophe Loviny/CORBIS also Chapter 14 timeline
- 12-15 © Ancient Art & Architecture Collection
- 12-16 ©Araldo de Luca/CORBIS
- 12-17 ©Scala/Art Resource, NY also Chapter 12 timeline
- 12-18 ©Erich Lessing/Art Resource, NY
- 12-19 ©Robert Harding Picture Library Ltd (Richard Ashworth)/Alamy
 - also Chapter 12 timeline and Chapter 12 map
- 12-20 ©Réunion des Musées Nationaux/Art Resource, NY also Chapter 12 map
- 12-21 ©Araldo de Luca/CORBIS 12-22 ©Scala/Art Resource, NY
- 12-23 ©Robert Harding Picture Library Ltd (John Ross)/Alamy
 - also Chapter 12 timeline
- 12-24 ©Robert Harding Picture Library (Roy Rainford)/Alamy also Chapter 12 timeline and Chapter 12 map
- 12-25 Canali Photobank
- 12-26 ©Visual Arts Library (London)/Alamy
- 12-27 ©Wendy Kay/Alamy
- 12-28 ©Robert Harding Picture Library (Roy Rainford)/Alamy

12-29	©Robert Harding Picture Library (John
	Miller)/Alamy

- 12-30 ©Scala/Art Resource, NY
- 12-31 ©Araldo de Luca/CORBIS
- 12-32 ©Alinari/Art Resource, NY

- 13-1 ©Scala/Art Resource, NY also Chapter 13 timeline
- 13-2 Image copyright ©The Metropolitan Museum of Art/Art Resource, NY
- 13-3 ©Erich Lessing/Art Resource, NY also Chapter 13 timeline
- 13-4 ©Cameraphoto Arte, Venice/Art Resource, NY also Chapter 13 map
- 13-5 ©Cameraphoto Arte, Venice/Art Resource, NY
- 13-6 ©Adam Eastland/Alamy
- 13-7 ©Rolf Richardson / Alamy also Chapter 13 timeline
- 13-9 ©The British Museum/Topham-HIP/The Image Works
 - also Chapter 13 timeline and Chapter 13 map
- 13-10 ©The British Library/Topham-HIP/The Image Works also Chapter 13 timeline and Chapter 13 map
- 13-11 ©The British Library/Topham-HIP/The Image Works
- 13-12 ©Steve Taylor/Alamy
 also Chapter 13 timeline and Chapter 13 map
- 13-13 ©Westend 61 (Andreas M. Gross)/Alamy also Chapter 13 timeline
- 13-14 ©Werner Forman/Art Resource, NY also Chapter 14 timeline
- 13-15 ©Adam Woolfitt/CORBIS
- 13-16 ©John and Lisa Merrill/CORBIS
- 13-17 ©Robert Harding Picture Library Ltd (Adam Woolfitt)/Alamy

 also Chapter 13 timeline and Chapter 13 map
- 13-18 ©Reiner Elsen/Mauritius Die Bildagentur Gmbh/Photolibrary
- also Chapter 13 map 13-19 ©John C. Huntington also Chapter 13 timeline
- 13-20 Robert L. Brown also Chapter 13 map
- 13-21 ©Erich Lessing/Art Resource, NY also Chapter 13 timeline and Chapter 13 map
- 13-22 ©coolangie/Alamy
- 13-23 ©David Crossland/Alamy
- 13-24 ©Erich Lessing/Art Resource, NY also Chapter 13 map
- 13-25 ©Bildarchiv Monheim GmbH (Florian Monheim)/Alamy also Chapter 13 map

- 13-26 Courtesy of the author
- 13-27 ©Photos 12 (Anne Joudiou)/Alamy
- 13-29 ©Bildarchiv Monheim GmbH (Florian Monheim)/Alamy also Chapter 13 timeline and Chapter 13 map
- 13-30 ©Jon Arnold Images/Alamy
- 13-31 ©Bildarchiv Monheim GmbH (Jochen Helle)/Alamy
- 13-32 ©Erich Lessing/Art Resource, NY
- 13-33 ©Erich Lessing/Art Resource, NY
- 13-34 ©Erich Lessing/Art Resource, NY
- 13-35 ©Arcaid (Richard Bryant)/Alamy
- 13-36 ©Scala/Art Resource, NY
- 13-37 ©Scala/Art Resource, NY
- 13-38 ©Scala/Art Resource, NY also Chapter 13 map

- 14-1 ©Scala/Art Resource, NY also Chapter 14 timeline
- 14-2 ©Erich Lessing/Art Resource, NY
- 14-3 ©Erich Lessing/Art Resource, NY
- 14-4 ©Duomo, Florence, Italy/Ken Welsh/The Bridgeman Art Library also Chapter 14 timeline and Chapter 14 map
- 14-5 ©Scala/Art Resource, NY
- 14-6 ©Erich Lessing/Art Resource, NY also Chapter 14 timeline
- 14-7 ©Scala/Art Resource, NY
- 14-8 ©Erich Lessing/Art Resource, NY
- 14-9 ©Scala/Art Resource, NY also Chapter 14 timeline
- 14-10 Bodleian Library
- 14-11 ©imagebroker/Alamy
- 14-12 ©Fratelli Fabbri, Milan, Italy/The Bridgeman Art Library
- 14-13 ©Erich Lessing/Art Resource, NY
- 14-14 ©Alinari/Art Resource, NY also Chapter 14 timeline and Chapter 14 map
- 14-15 © Araldo de Luca/CORBIS
- 14-16 ©Scala/Art Resource, NY also Chapter 14 timeline
- 14-17 ©Jim Zuckerman/Corbis
- 14-18 ©Erich Lessing/Art Resource, NY
- 14-19 ©Vittoriano Rastelli/CORBIS
- 14-20 ©Vittoriano Rastelli/CORBIS
- 14-21 ©Scala/Art Resource, NY
- 14-22 ©Alinari/Art Resource, NY also Chapter 14 timeline
- 14-23 ©Alinari/Art Resource, NY also Chapter 15 timeline
- 14-24 ©Villa Rotonda, Vicenza, Italy/Merilyn Thorold/The Bridgeman Art Library also Chapter 15 timeline and Chapter 14 map
- 14-25 ©Scala/Art Resource, NY
- 14-26 ©Art Resource, NY

14-27 ©Giraudon/Art Resource, NY 15-23 The Metropolitan Museum of Art Marquand also Chapter 14 timeline Collection, Gift of Henry G. Marquand, 1889 14-28 © SuperStock, Inc./SuperStock (89.15.21) Photograph ©The Metropolitan also Chapter 14 timeline and Chapter 14 map Museum of Art 14-29 ©Erich Lessing/Art Resource, NY also Chapter 15 timeline 14-30 ©Scala/Art Resource, NY 15-24 © Wallace Collection, London, UK/The Bridge-14-31 ©British Museum/HIP/Art Resource, NY man Art Library 15-25 ©Bildarchiv Preussischer Kulturbesitz/Art also Chapter 14 map 14-32 ©Cleveland Museum of Art, Leonard C. Hanna, Resource, NY Jr. Fund. 1984.37 15-26 ©Scala/Art Resource, NY 14-33 ©SuperStock, Inc. 15-27 Rijksmuseum, Amsterdam 14-34 ©Erich Lessing/Art Resource, NY 15-28 © National Gallery Collection; By kind permis-14-35 ©Musee d'Unterlinden, Colmar, France/The sion of the Trustees of the National Gallery, Bridgeman Art Library London/CORBIS 14-36 ©Erich Lessing/Art Resource, NY also Chapter 15 map 14-37 ©Erich Lessing/Art Resource, NY 15-29 ©Archivo Iconografico, S.A./CORBIS 14-38 ©Erich Lessing/Art Resource, NY 15-30 ©Erich Lessing/Art Resource, NY 14-39 ©Prado, Madrid, Spain/Giraudon/The 15-31 Andrew W. Mellon Collection, 1937.1.72. Image Bridgeman Art Library ©2007 Board of Trustees, National Gallery 14-40 ©Scala/Art Resource, NY of Art, Washington, DC. 14-41 ©Erich Lessing/Art Resource, NY 15-32 ©Réunion des Musées Nationaux/Art Resource, NY CHAPTER 15 also Chapter 16 timeline 15-1 ©Ali Meyer/The Bridgeman Art Library 15-33 ©Réunion des Musées Nationaux/Art Resource, NY 15-2The Art Archive/Galleria degli Uffizi Florence/ also Chapter 15 timeline Dagli Orti (A) 15-34 ©Reunion des Musees Nationaux (Robert also Chapter 15 timeline Polidori)/Art Resource. 15-3©Scala/Art Resource, NY 15-4 ©Erich Lessing/Art Resource, NY 15-35 ©Réunion des Musées Nationaux/Art Resource, NY 15-5© SuperStock, Inc./SuperStock 15-6 ©Nimatallah/Art Resource, NY 15-36 ©Réunion des Musées Nationaux/Art 15-7 Resource, NY ©Scala/Art Resource, NY ©The Detroit Institute of Arts, USA/Gift of Mr 15-37 © Réunion des Musées Nationaux (Harry Bré-15-8jat)/Art Resource, NY Leslie H. Green/The Bridgeman Art Library 15-38 ©Réunion des Musées Nationaux (Gérard also Chapter 15 timeline Blot)/Art Resource, NY 15-9 ©Scala/Art Resource, NY also Chapter 15 timeline also Chapter 15 timeline 15-39 ©SuperStock, Inc./SuperStock 15-10 ©Scala/Art Resource also Chapter 15 timeline 15-11 ©Erich Lessing/Art Resource, NY 15-40 ©Giraudon/The Bridgeman Art Library 15-12 ©Scala/Art Resource, NY 15-13 ©Joseph Martin/The Bridgeman Art Library also Chapter 15 timeline 15-14 ©Lightworks Media/Alamy CHAPTER 16 15-15 ©Hemis (Bertrand Gardel)/Alamy 15-16 ©CuboImages srl (Riccardo Lombardo/Alamy 16-1 ©ImageState (Pictor International)/Alamy 15-17 ©Erich Lessing/Art Resource also Chapter 16 timeline ©Dulwich Picture Gallery, London, UK/The also Chapter 15 map 16-2 15-18 ©Prado, Madrid, Spain/The Bridgeman Bridgeman Art Library Art Library 16-3 ©Francis G. Mayer/CORBIS

also Chapter 16 timeline

also Chapter 16 timeline

16-4

©Virginia Museum of Fine Arts, Richmond, VA.

The Adolph D. and Wilkins C. Williams Fund. Acc. #75.22. Photo: Katherine Wetzel.

15-19 ©Peter Willi/The Bridgeman Art Library

15-21 ©Giraudon/The Bridgeman Art Library

15-20 ©Erich Lessing/Art Resource, NY

also Chapter 15 map

15-22 ©Scala/Art Resource, NY

- 16-5 ©Réunion des Musées Nationaux (G. Blot/ C. Jean)/Art Resource, NY also Chapter 16 timeline
- 16-6 ©Musees Royaux des Beaux-Arts de Belgique, Brussels, Belgium/The Bridgeman Art Library
- 16-7 ©Erich Lessing/Art Resource, NY
- 16-8 ©Art Kowalsky/Alamy also Chapter 16 timeline
- 16-9 ©Erich Lessing/Art Resource, NY
- 16-10 ©British Museum/Art Resource, NY
- 16-11 ©Bildarchiv Preussischer Kulturbesitz (Elke Walford)/Art Resource, NY
- 16-12 © Burstein Collection/CORBIS also Chapter 16 timeline
- 16-13 ©Erich Lessing/Art Resource, NY also Chapter 16 timeline
- 16-14 ©Réunion des Musées Nationaux/Art Resource, NY
- 16-15 Image copyright ©The Metropolitan Museum of Art/Art Resource, NY
- 16-16 ©Pierre Barbier/Roger-Viollet/The Image Works also Chapter 16 timeline
- 16-17 ©Geoffrey Clements/CORBIS
- 16-18 ©Geoffrey Clements/CORBIS
- 16-19 ©Private Collection/The Bridgeman Art Library
- 16-20 ©Gus/Alamy also Chapter 15 timeline
- 16-21 ©Iconotec (Hugo Canabi)/Alamy also Chapter 16 timeline
- 16-22 ©Giraudon/The Bridgeman Art Library
- 16-23 Metropolitan Museum of Art, New York. Gift in memory of Jonathan Sturges by his children, 1895 (95.13.3). Photograph ©2001 The Metropolitan Museum of Art
- 16-24 ©Bridgeman Art Library, London/SuperStock also Chapter 17 timeline
- 16-25 ©British Museum/HIP/Art Resource, NY
- 16-26 ©Erich Lessing/Art Resource, NY
- 16-27 ©Erich Lessing/Art Resource, NY also Chapter 16 timeline
- 16-28 Image copyright ©The Metropolitan Museum of Art/Art Resource, NY
- 16-29 ©Adoc-photos/Art Resource, NY
- 16-30 ©Phoenix Art Museum, Arizona, USA/The Bridgeman Art Library

- 17-1 ©Lauros/Giraudon/The Bridgeman Art Library
- 17-2 ©Erich Lessing/Art Resource, NY also Chapter 17 timeline
- 17-3 Sterling and Francine Clark Art Institute, Williamstown, Massachusetts. Acquired by Sterling and Francine Clark, 1942. 1955.658

- 17-4 ©Erich Lessing/Art Resource, NY also Chapter 17 timeline
- 17-5 Image copyright ©The Metropolitan Museum of Art/Art Resource, NY
- 17-6 Image copyright © The Metropolitan Museum of Art/Art Resource, NY
- 17-7 Image copyright © The Metropolitan Museum of Art/Art Resource, NY
- 17-8 ©Réunion des Musées Nationaux/Art Resource, NY also Chapter 17 timeline
- 17-9 The Art Institute of Chicago, Gift of Arthur M. Wood in memory of Pauline Palmer Wood, 1985.1103. Photography ©The Art Institute of Chicago
- 17.10 Image copyright ©The Metropolitan Museum of Art/Art Resource, NY also Chapter 17 map
- 17-11 ©Burstein Collection/CORBIS
- 17-12 ©Erich Lessing/Art Resource, NY also Chapter 17 map
- 17-13 ©Francis G. Mayer/CORBIS also Chapter 17 timeline
- 17-14 ©Erich Lessing/Art Resource, NY
- 17-15 ©Erich Lessing/Art Resource, NY also Chapter 17 timeline
- 17-16 Image copyright ©The Metropolitan Museum of Art/Art Resource, NY
- 17-17 ©National Gallery of Art, Washington DC, USA, Index/The Bridgeman Art Library
- 17-18 ©Erich Lessing/Art Resource, NY
- 17-19 Courtesy of the author
- 17-20 Courtesy of the author also Chapter 17 timeline
- 17-21 ©SuperStock, Inc./SuperStock
- 17-22 ©Erich Lessing/Art Resource, NY also Chapter 17 timeline
- 17-23 ©Erich Lessing/Art Resource, NY
- 17-24 © Albright Knox Art Gallery, Buffalo, New York, USA/The Bridgeman Art Library
- 17-25 ©Stedelijk Museum, Amsterdam, The Netherlands/The Bridgeman Art Library
- 17-26 ©Mary Evans Picture Library/The Image Works
- 17-27 ©Réunion des Musées Nationaux (Richard Lambert)/Art Resource, NY
- 17-28 ©Yale University Art Gallery/Art Resource, NY also Chapter 16 timeline
- 17-29 ©Erich Lessing/Art Resource, NY also Chapter 17 timeline
- 17-30 Digital Image © The Museum of Modern Art/ Licensed by SCALA/Art Resource, NY also Chapter 17 map

- 17-31 Digital Image © The Museum of Modern Art/ Licensed by SCALA/Art Resource, NY
- 17-32 Digital Image © The Museum of Modern Art/ Licensed by SCALA/Art Resource, NY
- 17-33 Collection of Mr. and Mrs. Paul Mellon, in Honor of the 50th Anniversary of the National Gallery of Art. 1995.47.5. Image courtesy of the Board of Trustees, National Gallery of Art, Washington, DC.

also Chapter 17 timeline

- 18-1 ©JLImages/Alamy also Chapter 18 timeline
- 18-2 ©Erich Lessing/Art Resource, NY. ©2008 The Munch Museum/The Munch-Ellingsen Group/Artists Rights Society (ARS), New York.
- 18-3 Digital Image ©The Museum of Modern Art/Licensed by SCALA/Art Resource, NY. ©2008 The Munch Museum/The Munch-Ellingsen Group/Artists Rights Society (ARS), New York.
 - also Chapter 18 timeline
- 18-4 ©Hamburger Kunsthalle, Hamburg, Germany/ The Bridgeman Art Library. ©Ingeborg & Dr. Wolfgang Henze-Ketterer, Wichtrach/Bern
- 18-5 Statens Museum for Kunst, Copenhagen.
 © Nolde Stiftung Seebüll
- 18-6 San Francisco Museum of Modern Art, Collection SFMOMA . Bequest of Harriet Lane Levy 50.6075. © 2008 Artists Rights Society (ARS), New York/ADAGP, Paris.
- 18-7 ©SuperStock, Inc./SuperStock . ©2008 Succession H. Matisse, Paris/Artists Rights Society (ARS), New York.
 - also Chapter 18 timeline
- 18-8 Digital Image ©The Museum of Modern
 Art/Licensed by SCALA/Art Resource, NY.
 ©2008 Succession H. Matisse, Paris/Artists
 Rights Society (ARS), New York.
- 18-9 Helen Birth Bartlett Memorial Collection. 1926.253. Photography ©The Art Institute of Chicago.. ©2008 Estate of Pablo Picasso/Artists Rights Society (ARS), New York
- 18-10 The Brooklyn Museum, New York, Frank L. Babbott Fund. Acc. #52.160
- 18-11 Art Institute of Chicago, Major Acquisitions Centennial Fund. 1984.550. Photography © The Art Institute of Chicago.
- 18-12 Digital Image ©The Museum of Modern Art/Licensed by SCALA/Art Resource, NY. ©2008 Estate of Pablo Picasso/Artists Rights Society (ARS), New York.
 - also Chapter 18 timeline
- 18-13 ©Réunion des Musées Nationaux (R.G. Ojeda)/ Art Resource, NY. ©2008 Estate of Pablo Picasso/Artists Rights Society (ARS), New York.

- 18-14 Digital Image ©The Museum of Modern
 Art/Licensed by SCALA/Art Resource, NY.
 ©2008 Estate of Pablo Picasso/Artists Rights
 Society (ARS), New York.
- 18-15 Digital Image ©The Museum of Modern
 Art/Licensed by SCALA/Art Resource, NY.
 ©2008 Estate of Pablo Picasso/Artists Rights
 Society (ARS), New York.
- 18-16 ©Art Resource, NY. ©2008 Estate of Pablo Picasso/Artists Rights Society (ARS), New York.
 - also Chapter 18 timeline
- 18-17 Digital Image ©The Museum of Modern
 Art/Licensed by SCALA/Art Resource, NY.
 © 2008 Artists Rights Society (ARS), New
 York/ADAGP, Paris.
 - also Chapter 18 timeline
- 18-18 Digital Image © The Museum of Modern Art/ Licensed by SCALA/Art Resource, NY
- 18-19 Digital Image © The Museum of Modern Art/ Licensed by SCALA/Art Resource, NY also Chapter 18 timeline
- 18-20 ©The Philadelphia Museum of Art/Art Resource, NY. ©2008 Artists Rights Society (ARS), New York/ADAGP, Paris/Succession Marcel Duchamp.
- 18-21 Digital Image ©The Museum of Modern Art/ Licensed by SCALA/Art Resource, NY
- 18-22 ©Tate Gallery, London/Art Resource, NY. ©2008 Artists Rights Society (ARS), New York/ADAGP, Paris/Succession Marcel Duchamp.
 - also Chapter 18 timeline
- 18-23 Digital Image ©The Museum of Modern Art/Licensed by SCALA/Art Resource, NY. ©2008 Man Ray Trust/Artists Rights Society (ARS), New York.
- 18-24 ©SuperStock, Inc./SuperStock. ©Ingeborg & Dr. Wolfgang Henze-Ketterer, Wichtrach/Bern also Chapter 18 timeline
- 18-25 ©Bildarchiv Preussischer Kulturbesitz (Joerg P. Anders)/Art Resource, NY. ©2008 Artists Rights Society (ARS), New York/VG Bild-Kunst, Bonn.
- 18-26 Fine Arts Museums of San Francisco, Achenbach
 Foundation for Graphic Arts, #1963.30.874.
 ©2008 Artists Rights Society (ARS), New
 York/VG Bild-Kunst, Bonn.
 - also Chapter 18 timeline
- 18-27 ©Private Collection/The Bridgeman Art Library. ©2008 Artists Rights Society (ARS), New York/SIAE, Rome.
 - also Chapter 18 timeline
- 18-28 Digital Image ©The Museum of Modern
 Art/Licensed by SCALA/Art Resource, NY.
 ©2008 Artists Rights Society (ARS), New
 York/ProLitteris, Zurich.
 - also Chapter 18 timeline

- 18-29 Digital Image ©The Museum of Modern
 Art/Licensed by SCALA/Art Resource, NY.
 ©2008 Salvador Dali, Gala-Salvador Dali
 Foundation/Artists Rights Society (ARS),
 New York.
 - also Chapter 18 timeline
- 18-30 ©Francis G. Mayer/CORBIS. ©2008 Salvador Dali, Gala-Salvador Dali Foundation/Artists Rights Society (ARS), New York.
- 18-31 ©Francis G. Mayer/CORBIS. ©2008 Salvador Dali, Gala-Salvador Dali Foundation/Artists Rights Society (ARS), New York.
- 18-32 ©Banque d'Images, ADAGP/Art Resource, NY. ©2008 C. Herscovici, Brussels/Artists Rights Society (ARS), New York.
- 18-33 ©Banque d'Images, ADAGP/Art Resource, NY. ©2008 C. Herscovici, Brussels/Artists Rights Society (ARS), New York.

- 19-1 Solomon R. Guggenheim Museum, New York. Solomon R. Guggenheim Founding Collection, Gift, Solomon R. Guggenheim. 41.505. ©2008 Artists Rights Society (ARS), New York/ADAGP, Paris.
- 19-2 Digital Image ©The Museum of Modern Art/Licensed by SCALA/Art Resource, NY. ©2008 Artists Rights Society (ARS), New York/ADAGP, Paris.
 - also Chapter 19 timeline
- 19-3 Solomon R. Guggenheim Museum, New York. Solomon R. Guggenheim Founding Collection, Gift, Solomon R. Guggenheim. 45.989. ©2008 Artists Rights Society (ARS), New York/ADAGP, Paris.
 - also Chapter 19 timeline
- 19-4 ©2008 Mondrian/Holtzman Trust c/o HCR International Warrenton,VA
- 19-5 Digital Image ©The Museum of Modern Art/Licensed by SCALA/Art Resource, NY. ©2008 Mondrian/Holtzman Trust c/o HCR International Warrenton, VA
- 19-6 ©VIEW Pictures Ltd (Nathan Willock)/Alamy. ©2008 Artists Rights Society (ARS), New York/Beeldrecht, Amsterdam.
- 19-7 ©Vanni/Art Resource, NY
- 19-8 © Edifice (Adrian Forty)/CORBIS. ©2008 Artists Rights Society (ARS), New York/ADAGP, Paris/FLC.
- 19-9 ©Timothy McCarthy/Art Resource, NY. ©2008 Frank Lloyd Wright Foundation, Scottsdale, AZ/Artists Rights Society (ARS), New York. also Chapter 19 timeline
- 19-10 ©Paolo Koch/Photo Researchers, Inc. ©2008 Frank Lloyd Wright Foundation, Scottsdale, AZ/Artists Rights Society (ARS), New York.

- 19-11 Fisk University Galleries, Nashville, Tennessee. ©2008 Georgia O'Keeffe Museum/Artists Rights Society (ARS), New York.
- 19-12 Digital Image ©The Museum of Modern
 Art/Licensed by SCALA/Art Resource, NY.
 ©2008 Georgia O'Keeffe Museum/Artists
 Rights Society (ARS), New York.
 also Chapter 20 timeline
- 19-13 Collection, Center for Creative Photography, University of Arizona, Tucson. ©1981 Arizona Board of Regents
- 19-14 ©The Granger Collection, New York
- 19-15 Digital Image ©The Museum of Modern
 Art/Licensed by SCALA/Art Resource, NY.
 ©2008 The Willem de Kooning Foundation/
 Artists Rights Society (ARS), New York.
- 19-16 ©Geoffrey Clements/CORBIS. ©2008 The Willem de Kooning Foundation/Artists Rights Society (ARS), New York.
- 19-17 ©1991 Hans Namuth Estate, Courtesy, Center for Creative Photography, The University of Arizona, Tucson.
- 19-18 National Gallery of Art, Washington DC, USA, ©DACS/The Bridgeman Art Library. ©2008 The Pollock-Krasner Foundation/Artists Rights Society (ARS), New York. also Chapter 19 timeline
- 19-19 National Gallery of Art, Washington DC, USA, ©DACS/The Bridgeman Art Library. ©2008 The Pollock-Krasner Foundation/Artists Rights Society (ARS), New York.
- 19-20 Collection of The University of Arizona Museum of Art, Tucson. Gift of Edward J. Gallagher, Jr. Acc. No. 1964.001.001. ©2008 Kate Rothko Prizel & Christopher Rothko/ Artists Rights Society (ARS), New York.
- 19-21 Digital Image ©The Museum of Modern Art/Licensed by SCALA/Art Resource, NY. ©2008 Renate, Hans & Maria Hofmann Trust/Artists Rights Society (ARS), New York.
- 19-22 ©SuperStock, Inc./SuperStock. Copyright ©Helen Frankenthaler.
- 19-23 ©Panoramic Images/Getty Inc. ©2008 Calder Foundation, New York/Artists Rights Society (ARS), New York.
- 19-24 Whitney Museum of American Art, New York.
 Gift of Mr. and Mrs. Robert C. Scull 73.85a-i.
 Courtesy of Mark di Suvero and Spacetime
- 19-25 © Bill Maris/Arcaid/CORBIS
- 19-26 © new photo service/Alamy. ©2008 Artists Rights Society (ARS), New York/ADAGP, Paris/FLC.
 - also Chapter 20 timeline
- 19-27 © wim wiskerke/Alamy. ©2008 Artists Rights Society (ARS), New York/ADAGP, Paris/FLC.

- 20-1 ©Geoffrey Clements/CORBIS
- 20-2 Digital Image ©The Museum of Modern Art/ Licensed by SCALA/Art Resource, NY. Art © Robert Rauschenberg/Licensed by VAGA, New York, NY
- 20-3 Digital Image ©The Museum of Modern Art/ Licensed by SCALA/Art Resource, NY. Art © Jasper Johns/Licensed by VAGA, New York, NY
- 20-4 Digital Image ©The Museum of Modern Art/ Licensed by SCALA/Art Resource, NY. ©2008 Andy Warhol Foundation for the Visual Arts/Artists Rights Society (ARS), New York. also Chapter 20 timeline
- 20-5 ©The Andy Warhol Foundation, Inc./Art Resource, NY. ©2008 Andy Warhol Foundation for the Visual Arts/Artists Rights Society (ARS), New York.
- Whitney Museum of American Art, New York.
 50th Anniversary Gift of Mr. and Mrs. Victor
 W. Ganz 79.83a-b. Photograph by Jerry L.
 Thompson. Courtesy Oldenburg van Bruggen Foundation.
- 20-7 © Robert Holmes/CORBIS. Courtesy Oldenburg van Bruggen Foundation.
- 20-8 ©Don DiBernardo/Artifice Images.
- 20-9 ©Geoffrey Clements/CORBIS. Art © Judd Foundation. Licensed by VAGA, New York, NY
- 20-10 ©Tate Gallery, London/Art Resource, NY. Art ©Carl Andre/Licensed by VAGA, New York, NY
- 20-11 Digital Image ©The Museum of Modern
 Art/Licensed by SCALA/Art Resource, NY.
 ©Estate of Eva Hesse, and Hauser & Wirth,
 Zürich/London.
- 20-12 The Nelson-Atkins Museum of Art, Kansas City, Missouri. Gift of the Friends of Art, F75-13. Photograph by Jamison Miller.
- 20-13 Milwaukee Art Museum, Gift of Friends of Art, M1973.91. Photo by Ephraim Le-ver. Art ©Duane Hanson/Licensed by VAGA, New York, NY
- 20-14 Courtesy of SITE, New York also Chapter 20 timeline
- 20-15 ©Mehdi Chebil/Alamy
- 20-16 Photo: John Cliett. ©DIA Art Foundation
- 20-17 Photo: Wolfgang Volz. COPYRIGHT ©CHRISTO 1976.

- 20-18 photo ©Donald Woodman. ©2008 Judy Chicago/ Artists Rights Society (ARS), New York. also Chapter 20 timeline
- 20-19 ©James Luciana. ©2008 Judy Chicago/Artists Rights Society (ARS), New York.
- 20-20 Courtesy Guerrilla Girls, West
- 20-21 Courtesy Guerrilla Girls, New York
- 20-22 ©Chris Burden. Courtesy Gagosian Gallery
- 20-23 Courtesy of James Luna, Luiseno Tribe
- 20-24 Collection Van Abbemuseum, Eindhoven, Netherlands . Photograph: Peter Cox, Eindhoven, The Netherlands. Copyright ©Anselm Kiefer.
- 20-25 Collection of the Artist, courtesy Cheim & Read, New York. Photo © by Peter Moore. Art © Louise Bourgeois/Licensed by VAGA, New York, NY
- 20-26 Lucas Samaras
- 20-27 Courtesy of Acquavella Galleries, Inc. and the artist.
- 20-28 © Dave Jepson/Alamy
- 20-29 ©Art on File/CORBIS
- 20-30 © Wim Wiskerke/Alamy
- 20-31 ©The Philadelphia Museum of Art/Art Resource, NY. ©Estate of Richard Diebenkorn
- 20-32 The Nelson-Atkins Museum of Art, Kansas City, Missouri. Purchase: the Renee C. Crowell Trust, F95-16 A-C. Photograph by Robert Newcombe.
- 20-33 Courtesy of the author
- 20-34 Courtesy of Michael Rosenfeld Gallery, LLC, New York, NY and the Hammer Museum, Los Angeles.
- 20-35 Courtesy of Peres Projects, Los Angeles and John Connelly Presents, New York
- 20-36 Courtesy of the artist.
- 20-37 ©2002 Matthew Barney. Photo: Chris Winget. Courtesy Gladstone Gallery
- 20-38 Courtesy the artist and Yamamoto Gallery, Tokyo
- 20-39 Whitney Museum of American Art, New York.
 Partial and promised gift of Jeanne L. and
 Michael L. Klein 2005.86. Courtesy Eve
 Sussman & The Rufus Corporation.
- 20-40 Courtesy Galerie Emmanuel Perrotin, Paris & Miami. ©2006 Takashi Murakami/Kaikai Kiki Co., Ltd. All Rights Reserved.
- 20-41 Image courtesy of Sikkema Jenkins & Co.
- 20-42 Giuseppe Penone et Dina Carrara, 2003. ©2008 Artists Rights Society (ARS), New York/ ADAGP, Paris.
- 20-43 Courtesy of the author. ©2008 Artists Rights Society (ARS), New York/ADAGP, Paris.

INDEX

alla prima, 324

NOTE: Page references in **bold** indicate allegory, 340 appropriate imagery, 111 aquatints, 107 artwork, illustrations or photos. American Romanticism. see Hudson River School arbitrary colors, 54 American Studio Craft Movement, 197. A arcades, 165-166 architecture. see also ancient empires; faith Abakanowicz, Magdalena, Backs in a see also Studio Craft Movement architects, 162-164 Landscape, 198, 198 Amida Buddha (Jocho), 6, 6-7 Amiens Cathedral (France), 262, 262 art of, 162-170 Abduction of Rebecca, The (Delacroix), architecture, 174 contemporary approaches to, 184-185 351, **351** contemporary art and, 446-447, abstract art, 418-419 Choir (de Lazarches, de Cormont, de Cormont), 174 450-453, 464-465 Abstract Expressionism: Modern Art color and, 51, 51 International Style, 423-424 in America, 430-438 analogous colors, 49 Islamic, 252-254 De Stijl, 422-423 Analytical Cubism, 401 materials and methods, 171-179 Hitler and, 429-430 anatomical muscle studies (Leonardo "New Spirit," 424-425 International Style, 423-424 da Vinci), 278, 278 as product of its time, 179-183 Le Corbusier and, 424-425 anatomy, 277-278 Renaissance, 271-273, 289-290 nonrepresentational art, challenge ancient empires urban planning and, 183-184 of, 439 Buddhism and, 221-222 "Wonders of the World," 167-168 nonrepresentational art, spiritual path China, 209, 217-218 Arch of Constantine, 172, 232, 237, 237 to, 419-421 nonrepresentational art and Egypt, 64-65, 210-218 Ardabil Carpet, The (Iran), 194, 194 Arneson, Robert, California Artist, first civilizations, 209 Mondrian, 421-422 196, **197** Greece, 14, 50-52, 64, 88, 169-170, O'Keeffe and, 426-427 188, 218–228 Arrival of Marie de' Medici at Marseilles organic abstraction, 438-439 pollution and, 210-211 (Rubens), 320, 321 shift in Western art and, 428-430 Rome, 50-52, 228-237 art appreciation, 1-2, 36-37. See also straight photography, 428 time line, 208 individual media; individual periods Wright and, 425-426 Ancient Ruins in the Cañon de Chell, of art Abstract Expressionism, alternatives, N.M., in a Niche 50 Feet about the art, defined, 26-27 442-443 Present Cañon Bed (O'Sullivan), art as power, 14-15 Abstraction Blue (O'Keeffe), 427 artists and, 23-35 abstract shapes, 43 **117,** 117–118 Anderson, Laurie, Performance of "United culture and, 5-7 Achilles and Ajax Playing a Dice Game States Part II," 151, 151 faith and, 6-14 (Exekias), 188, 189 Acropolis. see Parthenon (Athens, Andre, Carl, Equivalent VIII, 448, 448 historical context, 4-5 AND THEN Rainbow DOB (Murakami), ideals represented by art, 14-23 Greece) acrylic painting, 95-96 470-471, **471** methods and materials, 4 Angkor Wat (Cambodia), 167, 168 "seeing," 3-4 action painting, 430-432 art criticism, 376-377 Action Photo 1 (Muniz), 98-99, 99 Angles, 248 animation, digital, 140-141, 140-142 art history, study of, 35 Adam and Eve Reproached by the Lord, anime, 140-141 Artifact Piece, The (Luna), 461, 461 257, 257 Annunciation and the Nativity, The Artist and Her Daughter, The (Vigée-Adams, Ansel, Clearing Winter Storm, (Pisano), 266 Lebrun), 337, 337 19-20, 20 Aphrodite of Melos, 226, 226 Artist in His Studio, The (Rembrandt), additive sculptural methods, 155 Apollo and Daphne (Bernini), 148-149, 38, 38 adobe, 171 **149,** 158, **158** Ashmolean Codex 399, folio 22R, 277, 277 Aesthetic Movement, 195 Apollodorus, Column of Trajan, 232, Ashurnasirpal II Hunting Lions, 147, Africa. see also individual works of art 232, 233 147-148 in Early Twentieth Century, 398-399 Apparition of Face and Fruit-Dish on a assemblages, 402 wood carving, 157, 157-158 After the Bath (Degas), 375, 378 Beach (Dalí), 416 Assume Vivid Astro Focus 8 (Assume Vivid Apple Macintosh, 136 Astro Focus), 468, 468 Age of Reason, 339 applied arts, defined, 26-27. See also Assyrian reliefs, 147-148 airbrush technique, 95-96 architecture; design Akhenaton, 214, 214-215 asymmetrical balance, 60

appliqué, 194

asymmetry, 59-60

Athena statue (reconstruction)	Bernini, Gianlorenzo, 311–314	Brancusi, Constantin, 404–405
(Debevec), 220, 220	Apollo and Daphne, 148–149, 149,	Bird in Space, 404
Athenians, 219–220	158, 158	Constantin Brancusi in His Studio
Atlan (Turrell), 44-46, 45, 453	Cornaro Chapel, interior, 313	(Steichen), 147
atmospheric perspective, 70	David, 312	Brandt, Marianne, Table Clock, 204, 204
At the Moulin Rouge (Toulouse-Lautrec),	The Ecstasy of Saint Theresa, 312	Braque, Georges, Violin and Palette, 74,
380, 381	Saint Peter's Basilica, 181, 181	74–75
Augustus of Prima Porta (Glyptotek), 50,	Throne of Saint Peter, 314	Bread! (Kollwitz), 412-413, 413
50–51	Bertelli, Renato, Head of Mussolini,	Breuer, Marcel, Club Chair B3, 203,
Augustus of Prima Porta (Roman),	14–15, 15	203–204
230, 230	Beuys, Joseph, How to Explain Pictures	bricks, 171
"autobiographical art," 462–464	to a Dead Hare, 150, 150–151	Bridge of Augustus over the Nera, The
Autun, 259	Bible Quilt: The Creation of the Animals	(Corot), 70–71, 71
avant-garde, 391	(Powers), 194, 195	Bridge over a Pool of Water Lilies (Monet),
Avril, Jean, 109	Bichitr, Jahangir Preferring a Sufi Shaikh	372–373, 373
Aztecs	to Kings, 15, 16	Broadway Boogie-Woogie (Mondrian),
	_	
Aztec Calendar, 251, 251	binders, 82, 88	421–422, 422
Figure of a Warrior, 296	Bird in Space (Brancusi), 404 , 404–405	Bruegel, Pieter, the Elder, 300–301
gold and, 295–296	Birth of Venus, The (Botticelli),	Hunters in the Snow, 301
D	274–276, 276	Landscape with the Fall of Icarus,
В	Blake, William, 20	300–301, 301
Backs in a Landscape (Abakanowicz),	Blind Man's Buff (Bourgeois), 44, 44	Brunelleschi, Filippo
198, 198	Blue Boy, The (Gainsborough), 341, 341	Dome of the Florence Cathedral,
Bakasura Disgorges Krishna (Bhagavata	Blue Crown (Littleton), 197, 198	272, 272
Purana manuscript), 94–95, 95	Blue Mountain (Kandinsky),	The Sacrifice of Isaac, 271, 271–272
balance, 58–59	419–421, 420	brush and ink drawing, 84–85
Ball, Giacomo, 129	Blur Building (Diller, Scofidio), 185, 185	Buddhism, 6-7, 221-222, 254
Balla, Giacomo, Dynamism of a Dog on	Boating (Manet), 369	mandalas, 97
a Leash, 129, 129	Boating Party, The (Cassatt), 378	printmaking and, 102-103
Bamboo in the Wind (Wu), 85, 85	Boccioni, Umberto	Buñuel, Luis, Un Chien Andalou, 130,
Barney, Matthew, CREMASTER 3,	The City Rises, 405, 406	130–131
<i>2002</i> , 469 , 469–470	Unique Forms of Continuity in	Burden, Chris, Shoot, 457-461, 460
Baroque period, 302, 306-314	Space, 406	Burgundy, Duke of, 291–293
in France, 328–334	Bonaparte crossing the Great Saint Bernard	Burial at Ornans, A (Courbet), 360
in Mexico, 315–316	Pass (Louis-David), 345	Butterly, Kathy, Yo, 200, 200
in North, 318–328	Bonheur, Rosa, 129, 361-362	Byodo-in Temple (Uji, Japan), 7
in Spain, 317–318	The Horse Fair, 361	Byzantine art, 244–247
barrel vaults, 173, 173 , 261	photo, 362	•
Bartlett, Jennifer, Spiral: An Ordinary	Book of Lindisfarne (ornamental page),	C
Evening in New Haven, 49, 49	248–249, 249	Cabinet (Pabst), 195 , 195–196
Battle of Romans and Barbarians, Ludovisi	Borobudur (Java, Indonesia), 167,	cage construction, 177
Battle Sarcophagus, 236, 236	167–168, 222	Cai Guo-Qiang, Drawing for Transient
Bauhaus (Dessau, Germany)	Bosch, Hieronymus, 298–300	Rainbow, 86–87, 87
(Gropius), 423	The Garden of Earthly Delights,	Calder, Alexander, 436
Bauhaus School, 203, 423–424	Creation of Eve, 298–300, 299, 300	Le Grande Vitesse, 436
Bavaria, lithography and, 107	Botticelli, Sandro, <i>The Birth of Venus</i> ,	Romulus and Remus, 40–41, 41
Bay, The (Frankenthaler), 95–96, 96	274–276, 276	Untitled, 149
	Bouguereau, Adolphe William, Nymphs	California Artist (Arneson), 196, 197
Bearden, Romare, Provence of Ritual:	and Satyr, 368, 368	
Baptism, 98, 98	Bourgeois, Louise	camera obscura, 114, 114
bearing wall method, 171	Blind Man's Buff, 44, 44	cameras, 116, 116 , 127. See also
beauty, art as, 31–32		photography
Bed (Rauschenberg), 442, 442–443	The Destruction of the Father,	Camera Work (magazine), 120
Behind the Gare Saint-Lazare, Paris	462–463, 463 hourgaging defined 368, 360	Cameron, Julia Margaret, Pomona,
(Cartier-Bresson), 118, 118	bourgeoisie, defined, 368–369	115–116, 116
Beowulf, 248	Boy in a Red Waistcoat (Cézanne), 389	Canova, Antonio, Portrait of Paulina
Berlinghieri, Bonaventura	Boy who loves water (Taylor), 136 , 137	Borghese as Venus Victorious,
Saint Francis Altarpiece, 266, 267	Bramante, Donato	344–346, 345
Saint Francis Preaching to the Birds,	Saint Peter's Basilica, 181	capitals, 170
266–267, 267	Tempietto, 60, 60	Cappella, A (Dougherty), 161, 161

Council of Trent, 304 Caravaggio, 308-311 computers, 133-136. see also digital The Conversion of Saint Paul, 309, 309 early Christian and Byzantine art, media; new media Naturalism and, 308-310 244-247 Comtesse d'Haussonville (Ingres), The Sacrifice of Isaac, 45 Protestant Reformation, 296-297 352-353. **353** The Supper at Emmaus, 308, 308 Temple Mount (Jerusalem), 164-165 Congo art, Oath-Taking Figure, 46-47, 47 Cardplaying War-Cripples (Dix), Christina's World (Wyeth), 91, 92 Constable, John, The Glebe Farm, 54, 55 410–411, **412** Christo Constantin Brancusi in His Studio carpets, 194 The Gates, 22, 22-23, 23 (Steichen), 147 Running Fence, 454, 454 Constantine the Great, 239-241 Cartier-Bresson, Henri, Behind the Gare Saint-Lazare, Paris, 118, 118 Wrapped Coast, 454-455 Arch of Constantine, 172, 232, 237, 237 Cassatt, Mary, 375-379 Christ with the Sick around Him, Receiving Constantine the Great, 240 The Boating Party, 378, 378-379 the Children (Rembrandt), Conté crayon, 82-83 The Letter, 107, 107 **106,** 107 contemporary art, 440-442. See also casting, 155-156, **156** Church, Frederick Edwin Modern Art Castle, Wendell, Ghost Clock, The Parthenon, 220 Abstract Expressionism, alternatives, 198-199, 199 Twilight in the Wilderness, 442-443 357-358, **358** cave paintings (Dordogne, France), 209, architecture and, 450-453 210 Churriguera, Jose Benito, 315 autobiographical art and, 462-464 City Rises, The (Boccioni), 405, 406 Cedra de Versilles (Penone), 472, contemporary nonrepresentation, Clapboards example, 175 466-468 472-473, **473** Celestial deities, Jagadambia Temple Classicism, 34, 328, 330 Earth Art and, 452-455 (Khajuraho, India), 255, 256 electronic media, 468-470 Clearing Winter Storm (Adams), 19-20, 20 globalism and, 470-473 censorship, 458-459 Closet, No. 7 (Scharf), 152, 152 Central Savings (Estes), 449, 449-450 Clothespin (Oldenburg), 445 installations, 468 ceramic jar (Martínez, Martínez), Club Chair B3 (Breuer), 203, 203-204 Judy Chicago and, 455-457 188, **188** Coca-Cola logo (Samuelson, Edwards), Minimalism, 447-449 ceramics, 187-188 28-29, 29 Neoexpressionist art, 461 Cézanne, Paul, 388-389 coffering, 234 performance art, 457-461 Boy in a Red Waistcoat, 389 Cole, Thomas, View on the Catskill, Early Pop art, 443-445 Still Life with Apples, 389 Autumn, 357, 357 Postmodern architecture, 464-465 Three Skulls, 94, 94 Coleridge, Samuel, 103 Postmodern art, 461-462 Chagall, Marc, I and the Village, 25, 25 collage, 96, 137, 401, 436 Superrealism, 449-450 chalk drawing, 80-82 Collection of Fossils and Shells Venturi and Pop architecture, 446-447 women and, 458-459 charcoal drawing, 80 (Daguerre), 115 Chartres Cathedral (France), 261, Collingwood, R.G., 35 contemporary city plans (Le Corbusier), colonnade, 181, 223 261-263, 264 184, **184** Latin Cross Plan, 260 color, 47 contemporary nonrepresentation, color wheel, 47-49, 48 466-468 Legend of Saint Cherón, 264 Saint Eustace Hunting, Life of Saint describing, 47 contour lines, 40 Eustace, 264 emotional resonance, 54-55 convergence, 73 in Greek and Roman art, 50-52 Chest of Tutankhamen with Hunting and Conversion of Saint Paul, The War Scenes, 64-65, 65 local color, 53 (Caravaggio), 309 chiaroscuro, 44, 310 naturalistic vs. arbitrary, 54 Conway, Don, 142 Chicago, Judy, The Dinner Party, 455-457, science of, 52-54 cool colors, 49 456, 457 simultaneous contrast, 53 Corinthian columns, 170, 170, 226 Chihuly, Dale, The Sun, 200, 200-201 Color-Field Painting, 433-434 Cornaro Chapel, interior (Bernini), 313 China, 209, 217-218. see also individual Colossal Buddha, Cave XX, 65, 66 Cornelia Pointing to Her Children as Her Colossal Head, Olmec, 146, 146 Treasures (Kauffman), 341-342, 342 works of art ceramics, 187 Colosseum (Rome, Italy), 231, 231 Corner Plot (Sze), 36, 37 Colossal Buddha, Cave XX, 65, 66 Corot, Jean Baptiste Camille, The Bridge of Column of Trajan (Apollodorus), 232, drawing techniques, 84, 86 232, 233 Augustus over the Nera, 70-71, 71 Orientalism, 354-356 combines, 442 Council of Trent, 304 Counter-Reformation, 302, 304-306 Choir of Amiens Cathedral (de Comparative Morphologies LIII (Syjuco), Lazarches, de Cormont, de **137,** 138 Courbet, Gustave Cormont), 174 complementary colors, 49 A Burial at Ornans, 360 Stonebreakers, 359-360 Christ as the Good Shepherd, 244, 244-245 compressed charcoal, 80 Christianity, 236-237. see also faith; computer-aided design (CAD), 178-179 Studio of a Painter, 34, 34-35 Renaissance; individual works of art Computer Composition/Mondrian Two Girls on the Banks of the Seine,

(Noll), 135, 135

367, **367**

art in early Middle Ages, 248-256

Court of Gayumars, The (Sultan	design and, 202-207	Diebenkorn, Richard, Ocean Park No. 79
Muhammad), 72, 72	design arts, 186	466, 466
Court of the Lions, Alhambra (Spain),	Japanese aesthetics, 190–191	digital media
166, 166	Studio craft Movement, 196–199	computers and, 133-136
Cousin "Bichonade" in Flight (photo), 118	de Cormont, Renaud, Choir of Amiens	digital animation, 140–142
Crack House (House Industries), 138, 138	Cathedral, 174	digital painting, 99
craft, defined, 28. See also decorative arts	deductive reasoning, 277	digital photography, 127, 134
crayon drawing, 82-83	Degas, Edgar, 129, 375–379	digital video, 138-139
Creation of Adam, The	After the Bath, 378	electronic media, 468–470
(Michelangelo), 284	Landscape, 112, 112	graphic and type design, 138
creativity, art as, 32-33	The Orchestra of the Paris Opera, 377	hardware, 136-137
CREMASTER 3, 2002 (Barney), 469,	Degenerate Art show, 429 , 429–430	image editing, 137-138
469–470	Déjeuner sur l'herbe, Le (Manet), 123, 368,	interactive, 143–144
cropping, 72	368–369	Internet, 142–143
cross-hatching technique, 83-84	de Kooning, Willem	Diller, Elizabeth, Blur Building, 185, 185
Crossing, The (Viola), 131–132, 132	Abstract Expressionism and, 430	DiNa (Leeson), 144, 144-145
Cry, The (Munch), 392, 392	Door to the River, 431	Dinner Party, The (Chicago), 455-457,
Cubism, 74–75, 96, 390, 397–405	Painting, 431	456, 457
Cubi XII (Smith), 159, 159	Woman and Bicycle, 31 , 31–32, 32	Discobolos (Myron), 224, 224-225
Cunningham, Imogen, Leaf Pattern,	Delacroix, Eugène, 349–351	di Suvero, Mark, Hankchampion, 437, 43'
20, 20–21	The Abduction of Rebecca, 351	Divan Japonais (Toulouse-Lautrec), 109,
Cycladic idol, Syros, 59, 59	caricature of, 353	109–110
·	Liberty Leading the People, 350	Dix, Otto, Cardplaying War-Cripples,
D	de Lazarches, Robert, Choir of Amiens	410–411, 412
Dacians, 232	Cathedral, 174	documentary photography, 119
Dada, 390, 407–412	della Francesca, Piero, View of an Ideal	Dogon ceremony, 10
Daguerre, Louis-Jacques-Mandé	City, 73, 73 , 74	Dogon village, 166
Collection of Fossils and Shells, 115	De Maria, Walter, Lightning Field,	Dome of the Florence Cathedral
daguerrotype and, 115	452, 452	(Brunelleschi), 272, 272
Dalí, Salvador, 130 , 414–415	de Merisi, Michelangelo. see Caravaggio	Dome of the Rock (Jerusalem),
Apparition of Face and Fruit-Dish on	Demoiselles d'Avignon, Les (Picasso), 400,	164–165, 165
a Beach, 416	400–401	Dominant Curve (Kandinsky), 421
The Persistence of Memory, 415	depth, 70–73	Donatello
Un Chien Andalou, 130, 130–131	Derain, André, Landscape (Derain),	David, 273, 274
Dance You Monster to My Soft Song!	395, 395	Saint Mark, 273, 273
(Klee), 24–25, 25	Descartes, René, 306	Donovan, Tara, Untitled, 62, 62
Dark Ages, 270	design, 202. see also decorative arts	Door to the River (de Kooning), 431
Daumier, Honoré, Rue Transnonain,	balance, 58–59	Doré, Gustav, The Rime of the Ancient
358–359, 359	Cubism, 74–75	Mariner, 103, 103
David, Jacques-Louis, 342–344	defined, 28–31, 56	Doric columns, 170, 170
Death of Marat, 344	depth, 70–73	Doryphoros (Polykleitos), 224, 226
Oath of the Horatii, 343	emphasis, 60–61	Dougherty, Patrick, A Cappella, 161, 161
David (Bernini), 311–312, 312	graphic design, 202–203	drawing, 76–77
David (Donatello), 273, 274	harmony of, in architecture, 164–166	brush and ink, 84–85
David (Michelangelo), 282	industrial design, 203-204	chalk, pastel, 80–82
da Vinci, Leonardo. see Leonardo da Vinci	interior design, 204–205	charcoal, 80
Dead Christ, The (Mantegna), 274, 275	landscape design, 206–207	contemporary approaches to, 85–87
Death of Marat (David), 342–344, 344	linear perspective, 73	crayon, 82–83
Debevec, Paul, Athena status	placement, 57–58	graphite, 77
(reconstruction), 220, 220	proportion, scale, 62–69	Medici Chapel restoration and,
de Chelles, Jean, 13	symmetry, asymmetry, 59–60	78–79 , 79
de Chirico, Giorgio, Mystery and	Tilted Arc (Serra) controversy and,	pen and ink, 83–84
Melancholy of a Street, 413,	68–69, 69	wash, 85
413–414	unity, variety, 61–62	Drawing for Transient Rainbow (Cai),
decorative arts	De Stijl, 422–423	86–87, 87
contemporary approaches in crafts,	Destruction of the Father, The (Bourgeois),	Duchamp, Marcel, 407–410
200–201	462–463, 463	Fountain, 409
craft media, 187–196	Dia Art Foundation, 452–453	<i>L.H.O.O.Q.</i> , 17, 17–19
defined, 28, 186–187	Diderot, Denis, 341	Nude Descending a Staircase, 408

Dürer, Albrecht, 293–295, 296	embroidery, 194	Fin de Siècle II (Paik), 469, 469
The Four Horsemen, 101 , 101–102	emphasis, 60–61	fine art photography, 120-121. See also
The Knight, Death, and the Devil, 294	Empire des lumières, L' (Magritte),	photography
Self-Portrait, 294, 294	415–417, 417	fine arts, defined, 26–27
Six Pillows, 83	encaustic painting, 88-89	Fire Station #4 (Venturi), 446, 446-447
Dutch Republic, Baroque in, 322-325	England, 210. see also individual	Fishing Boats at Sea (van Gogh), 39, 39
dwellings, art as, 166-167. See also	works of art	fixatives, 80
architecture	Enlightenment and, 339-340	Flag (Johns), 442–443, 443
Dynamism of a Dog on a Leash (Balla),	Romanticism and, 348	Florence Knoll showroom, 205, 205
129, 129	engraving, 104–106	flying buttresses, 174
	Enlightenment, 339–341	focal point, 61
E	environment (sculpture), 151-152	folk art, defined, 27
Early Renaissance, 274–279	Equivalent VIII (Andre), 448, 448	fonts, 138
Early Twentieth Century, 390–392	erasures, 85–86	foreshortening, 73
African art in, 398-399	Escher, M.C., Waterfall, 75, 75	forged metalwork, 192
Brancusi and, 404-405	Eskimo mask, 11	form, 43–44
Dada, 407–412	Estes, Richard, Central Savings, 449,	found objects, 16
Fauvism, 395–396	449–450	Fountain (Duchamp), 408-409, 409
Futurism, 405–406	etching, 106–107	Fountain of Apollo (Versailles, France), 206,
German Expressionism, 393–395	Et in Arcadia Ego (Poussin), 330, 330	206, 207
Matisse and, 396–397	exeditionary photography, 117	Four Books of Architecture, The
Modern Art, 408–409	Exekias, Achilles and Ajax Playing a Dice	(Palladio), 290
Munch and, 392-393	Game, 188, 189	Four Horsemen, The (Dürer),
Picasso and Cubism, 397-404	Expressionism, 390, 393–395	101, 101–102, 294
Surrealism, 413-417	_	Fragonard, Jean Honoré, The Swing, 336
World War I and, 406-407	F	frame construction, 174–175, 175
Earth Art, 152-155, 452-455	face paintings, Huli tribesman, Papua,	Framing example, 175
Écho, L' (Seurat), 44, 45 , 83	New Guinea, 12, 12	France. see also individual works of art
Echo of a Scream (Siquieros), 66, 70, 70	faith	Baroque period in, 328–334
Ecstasy of Saint Theresa, The (Bernini),	of ancient Egypt, 214–215	cave paintings (Dordogne), 209, 210
312, 312–314	art appreciation and, 6–14	French Revolution and, 342–344
Edison, Thomas, 130	Buddhism, 6–7, 97, 102–103,	Rococo in, 334–337
editions, of prints, 100	221–222, 254	Romanticism and, 348–351
Edmunds, Peter, 143, 143	Constantine the Great and, 239–241	Romanticism vs. Neoclassicism in,
Edwards, T. Clyde, Coca-Cola logo,	in early Christian and Byzantine art,	352–353
28–29, 29	244–247	Frankenthaler, Helen
Eero Saarinen, Trans World Airlines	in early Middle Ages, 248–256	The Bay, 95–96, 96
Terminal, Kennedy Airport (New	Hinduism, 154–155, 167, 168,	Mountains and Sea, 435, 435
York), 177–178, 178	255–256	New York School and, 435
egg tempera, 90	Islam, 164–165, 241–244, 252–254	Franks, 248
Egypt, 64–65, 210–218. See also individual	in Mesoamerica, 250–251	freestanding sculpture, 148
works of art	in Middle Ages, 257–267	fresco painting, 90
Eiffel, Gustave, Eiffel Tower, 176, 176 , 391	power of religious art, 12–14	Freud, Lucian, Painter Working, Reflection,
89 Seconds at Alcázar (Sussman), 470, 471	Protestant Reformation, 296–297	464, 464
electronic media, 468–470	sacrilege and religious images,	Friedrich, Caspar David, 347–348
elements of art	241–244	Wanderer über dem Nebelmeer, 348
color, 47–55	Temple Mount (Jerusalem), 164–165	The Wreck of the Hope, 50–52, 52
form, 43–44	time line, 238	Fuller, Buckminster, United States Pavilion,
light, shadow, value, 44–46	Fallingwater (Wright), 162 , 163 , 164	EXPO 67, 43, 43 Funerary portrait of a Roman couple
line, 39–40	Fauves, 395	* *
shape, 40–43	Fauvism, 390, 395–396	(Cato and Porzia), 229
space, 38	Federal Plaza (New York), 69	G
texture, 46–47	ferroconcrete, 177–178	
Elevation of the Cross, The (Rubens), 319, 320	fiber arts, 193–194	Gainsborough, Thomas, <i>The Blue Boy</i> , 341, 341
elevations, 163	figure, 57–59 figure-ground ambiguity, 58–59	Galloping Horse (Muybridge), 128 , 129
El Greco, 306–308	Figure of a Warrior (Aztec art), 296	Gamble House (Pasadena, California)
The Agony in the Garden, 307	figure of a warner (Aztec art), 290 figure of crowned God (Naym-Lap), 193	(Greene Brothers), 175, 204,
Purification of the Temple, 306	figure triangle, 280	204–205
g	o	

Garden of Earthly Delights, Creation of Eve	Glass House (New Canaan, Connecticut)	Grenouillère, La (Monet), 370, 370
(Bosch), 298–300, 299, 300	(Johnson), 437–438, 438	groin vaults, 173, 173
Garden of Love (Rubens), 321-322, 322	glazes, 93	Gropius, Walter, 162
Gardens for UNESCO (Noguchi),	Gleaners, The (Millet), 360, 360	Bauhaus (Dessau, Germany), 423
207, 207	Glebe Farm, The (Constable), 54, 55	Bauhaus School, 203, 423-424
Gardens of Versailles (Versailles, France),	Glyptotek, Ny Carlsberg, Augustus of	ground, 57–59
206, 206 , 207	Prima Porta, 50, 50–51	in etching, 106
Gates, The (Christo, Jeanne-Claude), 22,	gold, 295–296	painting and, 88
22–23, 23	Golden Buckle of Sutton Hoo, 248	Grünewald, Matthias
Gates of Hell, The (Rodin), 379–380	Golden Mean concept, 64	The Isenheim Altarpiece, 298
Paola and Francesca, 379	Gold Marilyn Monroe (Warhol),	Resurrection, 297–298, 298
The Thinker, 380	443–445, 444	Guerilla Girls, 458 , 458–459, 459
Gauguin, Paul	Gold Mine, Serra Pelada, State of Para,	Guernica (Picasso), 402-403, 403
Spirit of the Dead Watching, 382,	<i>Brazil</i> (Salgado), 125, 125	Guggenheim Museum of Art (Spain)
382–383	Gone, An Historical Romance of Civil War	(Gehry), 178–179, 179 ,
van Gogh and, 383, 387	as it Occurred Between the Duky	464–465
Gehry, Frank	Thighs of Young Negress and Her	Guilbert, Yvette, 110
Guggenheim Museum of Art (Spain),	Heart (Walker), 86, 87	Guitar (Picasso), 402
178–179, 179, 464–465	Gothic cathedrals. See also individual	
Nationale-Nederlanden building	names of cathedrals	Н
(Prague), 465	architecture of, 173-174	Hadid, Zaha, Sheikh Zayed Bridge, 184,
General Services Administration (GSA),	design of, 189	184–185
68–69	Gothic style, 261–265	Hagia Sophia, Anthemius of Tralles and
genre subject matter, 300-301	gouache painting, 94–95	Isidorus of Miletus (Istanbul,
Gentileschi, Artemesia, Judith and the	Goya, Francisco, 346–347	Turkey), 253, 253–254
Maidservant with the Head of	Great deeds—against the dead!, 347	Hall, Donald, 148
Holofernes, 310-311, 311	The Third of May, 1808, 346	Hall of Mirrors, Palace of Versailles
geometric shapes, 41	grain, 80	(France) (Hardouin-Mansart),
Georges Pompidou National Arts and	Grainstacks (End of Summer) (Monet),	332–334, 333
Cultural Center (Piano, Rogers),	371–372, 372	Hall of the Bulls (Lascaux?), 9
451, 451–452	Grande Odalisque (Ingres), 356, 356	Hals, Frans, 323–324, 325
Géricault, Théodore, Raft of the Medusa,	Grande Vitesse, Le (Calder), 436, 436	The Laughing Cavalier, 323
348–350, 349	Grandma Moses, Hoosick Falls, 27, 27	Malle Babbe, 324
German Expressionism, 390, 393–395	graphic and type design, 138	Hankchampion (di Suvero), 437, 437
Germantown "eye-dazzler" rug	graphic design, 29-31, 202-203	Hanson, Duane, Janitor, 450, 450
(Navajo), 28	Graphic User Interface (GUI), 136	Hardouin-Mansart, Jules, Hall of Mirrors,
Gérôme, Jean-Léon, Pollice Verso (Thumbs	graphite drawing, 77	Palace of Versailles (France), 333
Down), 363, 363	grazia, 274–276, 397	hardware, digital media and, 136–137
gestural drawing, 39	Great deeds—against the dead! (Goya),	harmony, 63, 164–166
Ghilberti, Lorenzo, The Sacrifice	346–347, 347	Hart, Frederick, Statue for Vietnam Veterans
of Isaac, 271	Great Mosque (Cordoba, Spain), 252,	Memorial, 19, 19
Ghost Clock (Castle), 198-199, 199	252–253, 253	Hawkinson, Tim, Überorgan, 467, 467
Giacometti, Alberto, 58	Great Sphinx, 210, 210	Head of Mussolini (Bertelli), 14-15, 15
photograph, 58	Great Stupa, The (Sanchi, India), 221-222,	Head of the Virgin (van der Weyden),
Walking Man II, 64, 65	222, 225	76, 77
Gift (Ray), 410	Great Temple of the Aztecs, 296	Hell (Bosch), 298-300, 300
Gin Lane (Hogarth), 104–106, 105	Great Wave, The (Hokusai), 385, 385	Hellenistic Greece, 226–228. See also
Giotto, Lamentation, 269–270, 270	Greece, 14, 218-228. See also individual	Greece
Giovanni Arnolfini and His Bride (van	works of art	Henry VIII (Holbein the Younger),
Eyck), 91–92, 92, 292, 293, 293	architecture, 169–170	14–15, 15
Girl before a Mirror (Picasso), 42, 43	color in, 50–52	Herakles and Telephos, 90
Gislebertus, Last Judgment, 257–258,	encaustic painting and, 88	Hermes with the Infant Dionysus
258, 260	pottery, 188	(Praxiteles), 14
Glaser, Milton, I (Heart) NY More than	proportion and, 64	Hesse, Eva, Repetition, 448, 448–449
Ever, 203	Greene Brothers	High Flying (Kenichi), 201, 201
glass, as decorative medium, 189	Gamble House, staircase, 204	High Renaissance, 279–280
glass architecture, 176–177, 437–438	Gamble House (Pasadena, California),	end of, in Italy, 290–291
glassblowing, 192	175, 204–205	Michelangelo and, 280–286
glass curtain, 424	Green on Blue (Rothko), 433, 433-434	Raphael and, 287–288

Hill with the Ruins of Montmajour (van	implied space, 72	aesthetics, 190–191
Gogh), 84, 84	Impression: Sunrise (Monet), 371, 371	anime, 140–141
Hinduism, 255–256	Impressionism, 364	architecture, 174–175
Angkor Wat (Cambodia), 167, 168	art criticism and, 376–377	depth in, 72
Kailasa Temple (Ellora, India), 154 ,	defined, 31–32	drawing techniques, 84
154–155	Degas and Cassatt, 375–379	Important Cultural Properties/
Hiroshige, Utagawa (Ando), Maple Leaves	Manet, 368–370	National Treasures, 5
at the Tekona Shrine, 71 , 71–72	Monet, 370–373	Japonisme, 384–385
Hitler, Adolf, 429–430	Morisot, 374–375	Orientalism, 354–356
Höch, Hannah, Schnitt mit dem	Postimpressionism and, 380–389	printmaking and, 102–103
Küchenmesser Dada durch die erste	Renoir, 373–374	Japanese Sand Garden (Ryoanji Zen
Weimarer Bierbauchkulturepoche Deutchlands, 122	Rodin, 377–380	Temple), 191, 191
*	Salons and, 365–368	jar (Martínez, Martínez), 188
Hockney, David, A Large Diver,	India. See also individual works of art	Javacheff, Christo. see Christo
112, 113	Bakasura Disgorges Krishna (Bhagavata	Jeanne-Claude
Hofmann, Hans, Memoria in Aeternum, 434, 434–435	Purana manuscript), 95 Kailasa Temple (Ellora, India), 154,	The Gates, 22 , 22–23, 23 Wranned Coast, 454–455
Hogarth, WIlliam, Gin Lane,	154–155	Wrapped Coast, 454–455 Jefferson, Thomas, Monticello
104–106, 105	Orientalism and, 354–355	(Charlottesville, Virginia), 179,
Hokusai, Katsushika	painting in, 94–95	182 , 182–183, 354
The Great Wave, 385, 385	Sand Mandala (Drepung Loseling	Jocho, <i>Amida Buddha</i> , 6 , 6–7
Hotei, 40 , 41, 84	Monastery, India), 97, 97	John 3:16 (Pfeiffer), 138–139, 139
Holbein, Hans, the Younger, 296–297	inductive reasoning, 277	Johns, Jasper, 442–443
Henry VIII, 14–15, 15	industrial design, 28, 203–204	Flag, 443
Portrait of Sir Thomas More, 297, 297	Ingres, Jean Auguste Dominique (J.A.D.),	The Seasons: Summer, 89, 89
Holland, De Stijl and, 422–423	76, 351–353	John's Jacket (Levine), 197, 197
Holofernes, 310	caricature of, 353	Johnson, Philip
Holt, Nancy, Sun Tunnels, 153 , 153–155	Comtesse d'Haussonville, 353	Glass House (New Canaan,
Homage to New York (Tinguely),	Grande Odalisque, 356	Connecticut), 437–438, 438
150, 150	Oedipus and the Sphinx, 352	Seagram Building (New York City),
Homer, 88	Portrait of Madame Ingres, 77, 77	177, 177
Ho-o-do (exterior), 7	installations	Jolly Toper, The (Leyster), 325
Hoosick Falls (Grandma Moses), 27, 27	contemporary art, 468	Judd, Donald, <i>Untitled</i> , 447 , 447–448
horizon line, 73	sculpture, 151–152	Judith, 310–311
Horse Fair, The (Bonheur), 361,	intaglio printmaking, 103-107, 104, 106	Judith and the Maidservant with the Head
361–362	intensity, 48	of Holofernes (Gentileschi),
Horta, Victor, Horta House, 205, 205	interior design, 204–205	310–311, 311
Horta House (Horta), 205, 205	International Exhibition of Modern Art	Justinian and Attendants, 245, 245–246,
Hotei (Hokusai), 40, 41, 84	(1913), 408	247, 249, 266
House Industries, 138, 138	International Style, 423–424, 446–447	
House of Fabergé, Lilies of the Valley Egg,	Internet, 142–143	K
193, 193	Ionic columns, 170, 170	Kahlo, Frida, The Little Deer, 24, 24
House of Gris Gris (Saar, Saar), 468, 468	iron architecture, 176	Kailasa Temple (Ellora, India), 154,
House (Whiteread), 21, 21–22	Isenheim Altarpiece, The (Grünewald), 298	154–155
How to Explain Pictures to a Dead Hare	Ise Shrine (Japan), 175, 175	Kallikrates, Temple of Athena Nike,
(Beuys), 150 , 150–151	Islam, 164–165, 241–244, 252–254	Acropolis (Athens, Greece), 170
Hudson River School, 357–358	Itkinos and Kallikrates, Parthenon	Kan, Han, Night Shining White, 26, 26
hue, 48	(Athens, Greece), 169, 169	Kanaga, mask, 10
humanism, 272	Ivanhoe (Scott), 351	Kandinsky, Vasily
Hunters in the Snow (Bruegel), 301, 301		Blue Mountain, 419–421, 420
I.	Look Phodos the Con CL 1	Dominant Curve, 421
-	Jacob Blessing the Songs of Joseph	Painting No. 199, 421
I and the Village (Chagall), 25, 25	(Rembrandt), 327, 328	Pink Accent, 54–55, 55 , 421
Ichinyû, Raku, 190	Jagadambi Temple (Khajuraho, India), 256, 256	Kauffman, Angelica, Cornelia Pointing to Her Children as Her Treasures,
I (Heart) NY More than Ever (Glaser), 203 Iliad, The (Homer), 88	Jahangir Preferring a Sufi Shaikh to Kings	341–342, 342
image editing, 137–138	(Bichitr), 15, 16	Kaufman House (Fallingwater)
immortality, art and, 15–16	Janitor (Hanson), 450, 450	(Pennsylvania) (Wright), 162 ,
impasto, 93, 288	Japan. See also individual works of art	163, 164
1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	J 1	

Kelly, Ellsworth, Red/Blue, 56, 57	Last Judgment (Gislebertus), 257–258,	Lin, Maya Ying, Vietnam Veterans
Kenichi, Nagakura, High Flying, 201, 201	258, 260	Memorial, 17–18, 18
Ken Moody and Robert Sherman	Last Supper, The (Leonardo da Vinci), 281,	Lindisfarne, 248–249
(Mapplethorpe), 123 , 123–124	281, 284–286, 286	line, 39–40
Kentridge, William, Tide Table, 85–86, 86	Last Supper, The (Nolde), 394, 394–395	linear perspective, 73–75
Kiefer, Anselm, Märkische Heide, 461–462, 462	Last Supper, The (Tintoretto), 304–306, 305	linear style, of painting, 352–353 litho crayons, 107
kinetic sculpture, 148–150, 436	Latrobe, Benjamin, United States Capitol	lithographic process, 108
kinetoscope, 130	(Washington, D.C.), 183	lithography, 107–108, 108
king mounted with attendants (plaque)	Laughing Cavalier, The (Hals), 323, 323-	Little Deer, The (Kahlo), 24, 24
(Nigeria), 148, 148	324, 325	Littleton, Harvey, Blue Crown, 197, 198
Kirchner, Ernst Ludwig	Leaf Pattern (Cunningham), 20, 20-21	Lives of the Artists (Vasari), 280–281
Self-Portrait as Soldier (Kirchner),	Le Corbusier	local color, 53, 53
410–411, 411	"New Spirit" in architecture,	Loge, La (Renoir), 32
Self-Portrait with Model (Kirchner), 393, 393	424–425 Notre Dame du Haut, interior	looms, 194 Lorna (Leeson), 144
Kiss of Death (Noble, Webster), 160, 160	(Ronchamp, France), 439	lost wax method of casting,
Kitchen Painting (Murray), 98, 99	Notre Dame du Haut (Ronchamp,	155–156, 156
Klee, Paul, Dance You Monster to My Soft	France), 438 , 438–439	Louis-David, Jacques, Bonaparte crossing
Song!, 24–25, 25	plan for contemporary city, 184, 184	the Great Saint Bernard Pass, 345
Kline, Franz, New York, New York, 40, 41	Villa Savoye (Poissy, Ile-De-France,	Louis XIV, king of France, 331–334
Kluver, Billy, 135	France), 424	Louis XIV (Rigaud), 331
Knight, Death, and the Devil, The (Dürer),	Leeson, Lynn Hershman, 144 , 144–145	Lumière brothers, 130
294, 294 Knoll, Florence, showroom, 205, 205	Lorna, 144 Synthia, 145	Luna, James, <i>The Artifact Piece</i> , 461, 461 Luther, Martin, 296–297
Knoll, Hans, 205	Legend of Saint Cherón, 264	Luxo Jr. (Lasseter), 140–142, 142
Knoll Planning Unit, 205	lenses, 116	21110 Jr. (2005ecc1), 110 112, 112
Kollwitz, Käthe	Leonardo da Vinci, 276–279	M
Bread!, 412-413, 413	anatomical muscle studies by,	Maclean, Bonnie, The Yardbirds, The Doors
Self Portrait, 80, 80	278, 278	110, 110
Kongorikishi (Guardian King) (Unkei),	The Last Supper, 281, 281 ,	Madonna dal Còllo Longo
158, 158 Waalhaas Para Saattla Public Library	284–286, 286	(Parmigianino), 304
Koolhaas, Rem, Seattle Public Library, 465, 465	L.H.O.O.Q. (Duchamp) and, 17 , 17–19, 409–410	Madonna della Sedia (Raphael), 288, 288 Magritte, René, 415–417
Koran, Ten Leaves from, with Kufic	Mona Lisa, 2 , 2–5, 3 , 4 , 5	L'Empire des lumières, 417
Script, Abbasid Caliphate, 241,	30 Are Better Than One (Mona Lisa)	The Treachery of Images, 417
241	(Warhol) and, 33, 33	Mahongwe mask (Gabon, Africa), 399
Kruger, Barbara, Untitled (We don't need	The Virgin of the Rocks, 279–280, 280	Making of a Fresco, Showing the Building
another hero), 111, 111	Vitruvian Man, 64, 64	of a City, The (Rivera), 90, 91
L	Letter, The (Cassatt), 107, 107	Malle Babbe (Hals), 324, 324 , 325
	Levine, Marilyn, <i>John's Jacket</i> , 197, 197 Leyster, Judith, 325	mandalas, 60, 97, 97 Manet, Édouard, 368–370
La Forge, John, Peonies in the Wind with Kakemono Borders, 189–190, 191	The Jolly Toper, 325, 325	Boating, 369
Lamentation (Giotto), 269–270, 270	The Proposition, 324	Le Déjeuner sur l'herbe, 123, 369
Landscape (Degas), 112, 112	L.H.O.O.Q. (Duchamp), 17, 17–19,	manga ("easy, silly pictures"), 140
Landscape (Derain), 395, 395	409–410	Mannerism, 302, 303–304, 338
landscape design, 206-207	Liberation of Aunt Jemima, The (Saar),	Mantegna, Andrea
landscape photography, 117	16, 16	The Dead Christ, 274, 275
Landscape with the Fall of Icarus (Bruegel),	Liberty Leading the People (Delacroix), 350	Room of the Newlyweds, 274, 275
300–301, 301 Lange, Dorothea, Migrant Mother, Nipomo	Liddel, Alice, 116 Life of Saint Eustace, 264	Maple Leaves at the Tekona Shrine, (Hiroshige), 71 , 71–72
Valley, 119 , 119–120	light, 44–46. See also individual periods	Mapplethorpe, Robert, Ken Moody and
Laocoön group, 228, 229	Baroque period and, 302, 306–334	Robert Sherman, 123 , 123–124
Large Diver, A (Hockney), 112, 113	Mannerism and, 302, 303–304	maquette models, 155
"larger than life," 65	Picasso and, 32-33	Marinetti, Filipo Tomasso, 405–406
Lartigue, Jacques-Henry, 118	Rococo and, 302, 334–337	Marinetti, F.T., 129
Lasseter, John, <i>Luxo Jr.</i> , 140–142, 142	Lightning Field (De Maria), 452, 452	Märkische Heide (Kiefer), 461–462, 462
Last Judgment, The (Michelangelo), 290,	Lilies of the Valley Egg (House of Fabergé), 193, 193	Martínez, Julian, 188, 188
290–291	173, 173	Martínez, María Montoya, 188, 188

masks mixed media, 96-97, 160-161 Muybridge, Eadward, 128, 129, 130 Eskimo, 11 Miyazaki, Hayao, Spirited Away, Mycerinus and His Queen (Giza), 214, 214 140-141, 141 Myron, Discobolos, 224, 224-225 Kanaga, 10 Mahongwe mask (Gabon, Africa), 398 mobile sculpture, 148, 436 Mystery and Melancholy of a Street (de Chirico), 413, 413-414 masonry, 172 modern, defined, 338 mass, 41 Modern Art, 35, 390, 408-409. See also N Matisse, Henri contemporary art The Moroccans, 397, 397 in America, 430-438 Nash, John Picasso and, 403 Hitler and, 429-430 Royal Pavilion at Brighton, 354, Red Room (Harmony in Red), 396, Modjesko, Soprano Singer (van Dongen), 354-355 396-397 54, 54 Taj Mahal (Agra, India), Mona Lisa (Leonardo da Vinci), 2, 2-5, matte, 188 354–355, **355** Matthew, Saint, in Book of Lindisfame, 249 3, 4, 5 National Endowment for the Arts Mayans, 250, 250-251 L.H.O.O.Q. (Duchamp) and, 17, (NEA), 124 Medici Crypt Drawing (Michelangelo), 17 - 19Nationale-Nederlanden building (Prague) 78-79, **79** 30 Are Better Than One (Mona Lisa) (Gehry), 465 Medici family, patronage of, 78-79, 273 (Warhol) and, 33 Native Americans. see also individual works medieval art, in Italy, 265-267 Mondrian, Piet, 421-422 of art Medieval Era, 291 Broadway Boogie-Woogie, 422 Germantown "eye-dazzler" rug, 28 Meditation Mystery (Uelsmann), 127, 127 Computer Composition (Noll), 135 pottery, 188 medium/media, defined, 76, 88 Tableau, 422 Taos Pueblo (Taos, New Mexico), Melting Candelabrum (Mimlitsch-Gray), Monet, Claude, 370-373 171, **171** 201 201 Bridge over a Pool of Water Lilies, 373 Naturalism, 308-310, 317-318 Grainstacks (End of Summer), 372 Memoria in Aeternum (Hofmann), 434, naturalistic colors, 54 434-435 Impression: Sunrise, 371, 371 naturalistic sculpture, 223 memory, of artists, 25 La Grenouillère, 370, 370 nave, defined, 260 Meninas, Las (Velázquez), 317, Nympheas (Water Lilies), 373 Nave of Sainte-Madeleine (Vézelay, 317-318, **318** monotypes, 112 France), 173 Mesoamerica, 250-251. See also individual montage, digital media and, 137 Naym-Lap, figure of crowned God, 193 works of art Monticello (Charlottesville, Virginia) negative form, 57 metal engraving, 104-106 (Jefferson), 179, 182, negative space, 57 metalpoint, 77, 81 182-183, 354 Neoclassicism, 302, 338, 341-346 metalwork, 192-193 Moore, Henry, Sheep Piece, 46, 46 Bonheur and, 361–362 Metropolitan Cathedral Morisot, Berthe, Woman at her Toilette, Orientalism and, 354-356 (Mexico City), 315 374–375, **375** Romanticism and, in academic art, Mexico, 210, 315-316. See also individual Moroccans, The (Matisse), 397, 397 362-363 Morris, William, The Well at the World's works of art neo-eclectic art, 464 End, 202, 202 Michelangelo Buonarroti, 280-286 Neoexpressionist art, 461 The Creation of Adam, 284 Mosaic Interior of San Vitale, 247 Netherlands, Baroque in, 318 David, 282 mosaics, 235-236 neutral colors, 48 fresco painting by, 90 Moses, Anna Mary Robertson. See Nevelson, Louise, Sky Cathedral, 159, The Last Judgment, 290, 290-291 Grandma Moses, Hoosick Falls 159-160 Medici Chapel restoration, 78-79 Mother and Child (Mali), 157, 157 New Abstraction (Untitled, no. 25) Medici Crypt Drawing, 79 Moulin de la Galette, Le (Renoir), (Welling), 57, 57 Pietá, 281, 281-282 **374,** 381 new media, 128 Saint Peter's Basilica (Rome), Mountains and Sea (Frankenthaler), computers and artists, 133-136 179-181, **180, 181** 435, **435** digital media forms, 136-145 Sistine Chapel, 283, 283-285, 284 moving pictures, 130-131 time as medium, 129-133 Migrant Mother, Nipomo Valley (Lange), Mrs. Siddons as the Tragic 'Muse New Objectivity, 410-411 **119,** 119–120 (Reynolds), 339-340, 340 Newton, Sir Isaac, 52, 306 mihrab, 253 Munch, Edvard New York, New York (Kline), 40, 41 Millet, Jean François, The Gleaners, The Cry, 392, 392 New York School, 435 360, **360** Puberty, 392, 392 New Zealand \$10 bill, 29, 29-31 Mimlitsch-Gray, Myra, Melting Muniz, Vik, Action Photo 1, 98-99, 99 nibs, 84 Candelabrum, 201, 201 Murakami, Takashi, AND THEN Night Cafe, The (van Gogh), 386, 386 minarets, 253 Rainbow DOB, 470-471, 471 Night Shining White (Kan), 26, 26 Minimalism, 447–449 Murray, Elizabeth, Kitchen Painting, 98, 99 Nike of Samothrace, 228, 228 Miss Loie Fuller (Toulouse-Lautrec), "Muscle System, The" (Vesalius), nirvana, 254 108, 108 278, **278** Noble, Tim, Kiss of Death, 160, 160

N . ' DI 1 1011 TI E11'		D 4 TI (Cl. 1) 220
Nocturne in Black and Gold: The Falling	Orchestra of the Paris Opera, The (Degas),	Parthenon, The (Church), 220
Rocket (Whistler), 376	375, 377	Parthenon (Athens, Greece), 169,
Noguchi, Isamu, Gardens for UNESCO,	organic abstraction, 438–439	169, 170
207, 207	organic shapes, 41	floor plan, 221
Nolde, Emile, The Last Supper, 394,	Orientalism, 354–356	The Parthenon (Church),
394–395	originality, art as, 32–33	219–220, 220
Noll, Michael, 135, 135	Ostby, Eben, 142	post-and-lintel construction, 172, 172
nonrepresentational art. see abstract art	O'Sullivan, Timothy, Ancient Ruins in the Cañon de Chell, N.M., in a Niche	
nonrepresentational shapes, 43 Northern Renaissance	50 Feet about the Present Cañon	restoration, 211 Three Goddesses, 223, 223
beginning of, 291–297	Bed, 117, 117–118	pastel drawing, 80–82
darker side, 297–300	Oursler, Tony	patterns, 62–63
Notre Dame Cathedral	Studio: Seven Months of my Aesthetic	Pax Romanus, 230
nave vaults, 12	Education (and then some), 35, 35	Peabody (Animal Drawings) (Smith),
rose window of north transept, 13	Woo, 160, 160–161	113, 113
Notre Dame du Haut (Ronchamp,	<i>7700</i> , 100 , 100–101	Pear-shaped Vase for Alcohol, 187, 187
France) (Le Corbusier), 438 ,	P	pen and ink drawing, 83–84
438–439, 439		Penone, Giuseppe
Nude Descending a Staircase	Pabst, Daniel, <i>Cabinet</i> , 195 , 195–196	Cedra de Versilles, 472–473, 473
(Duchamp), 408	Paik, Nam June	
nudes, mythology and, 34–35	Fin de Siècle II, 469, 469	Cedra de Versilles (photo of artist), 472 Penseur, Le (Steichen), 120 , 120–121
Number 1 (Pollock), 431, 432	TV Buddha, 131, 131	Peonies in the Wind with Kakemono Borders
Nympheas (Water Lilies) (Monet),	painterly styles, 352–353	
372–373, 373	Painter Working, Reflection (Freud), 464, 464	(La Forge), 189–190, 191 Pepper 30 (Weston), 121, 121
Nymphs and Satyr (Bouguereau), 368, 368	painting, 88. See also individual names	performance art, 150–151, 457–461
Trympus unu Suryi (Douguereau), 300, 300	of periods; individual works of art	Performance of "United States Part II"
0	acrylic, 95–96	(Anderson), 151, 151
	digital painting, 99	Persian carpets, 194
Oath of the Horatii (David), 342–344, 343	Early Renaissance, 274–279. See also Renaissance	Persistence of Memory, The (Dalí),
Oath-Taking Figure (Congo art),		414–415, 415
46–47, 47 Object (La Déjeuse en formuna)	encaustic, 88–89 fresco, 90	perspectives, 163
Object (Le Déjeuner en fourrure)	· · · · · · · · · · · · · · · · · · ·	Peruffia, Vincenzo, 3
(Oppenheim), 414	mixed media, 96–97, 97	Peruvian metalwork, 192–193
obscenity, photography and, 123–124 Ocean Park No. 79 (Diebenkorn), 466, 466	oil, 91–94 shaped canvases, 97	Pfeiffer, Paul, 138–139, 139
oculus, 233	_	Phantasmata (Samaras), 463, 463
Odani, Motohiko, Rompers, 470, 470	tempera panel, 90–91 unique materials in, 97–98	Phoenix Hall, 7
Oedipus and the Sphinx (Ingres),	watercolor, gouache, 94–95	photograms, 57
351–352, 352	Painting (de Kooning), 431	photography, 114
oil painting, 91–94	Painting No. 199 (Kandinsky), 421	cameras, 116, 116
O'Keeffe, Georgia, 426–427	Palace of Versailles (France), 331–334, 332	contemporary approaches to,
Abstraction Blue, 427	Gardens of Versailles, 206, 206 , 207	125–127
Radiator Building—Night,	Hall of Mirrors	digital, 127, 134
New York, 427	(Hardouin-Mansart), 333	fine art photography, 120–121
Two Calla Lilies on Pink, 63, 63	King's Bedroom, 333	obscenity and, 123–124
Oldenburg, Claes	Salon de la Guerre, 334	photomontage, 121–125
Clothespin, 445	Palazetto Zuccari (Zuccaro), 304	straight photography, 117–120, 428
Soft Toilet, 445	Paley, Albert, Portal Gates, 199, 199	technique and development,
Store Days, 445	Palladio, Andrea	114–116
Old Guitarist, The (Picasso), 399 , 399	The Four Books of Architecture, 290	photomontage, 121–125
Olmecs	Villa Rotonda, 289, 289–290	photorealism, 449–450
culture of, 250	Pantheon (Rome, Italy), 233–235, 234 ,	Photo-Secession group, 120
Olmec Head, 146, 146	235, 246	Piano, Renso, Georges Pompidou
Olowe of Ise, Veranda Post of Enthroned	Pantheon (Soufflot), 62–63, 63	National Arts and Cultural Center,
King and Senior Wife (Opo Ogoga),	papermaking, 112–113	451, 451–452
398, 398	Parmigianino, 303–304	piazza, 181, 314
one-point perspective, 73	Madonna dal Còllo Longo,	Picasso, Pablo, 32–33
Oppenheim, Meret, Object (Le Déjeuner	303–304, 304	Cubism and, 397-404
en fourrure), 414	Self-Portrait in a Convex Mirror, 303,	Girl before a Mirror, 42, 43
Orange Disaster (Warhol), 443-445, 444	303	Guernica, 403

C '/ 400	D () E () E () () () () ()	
Guitar, 402	Potato Eaters, The (van Gogh), 383	Raft of the Medusa (Géricault),
Les Demoiselles d'Avignon, 400 The Old Guitarist, 399	Poussin, Nicolas, Et in Arcadia Ego, 330, 330	348–350, 349
*	power, art as, 14–15	raku, 190, 196
photograph of, 32 Still Life with Chair-Caning, 401	Powers, Harriet, Bible Quilt: The Creation	Raphael Madonna della Sedia, 288, 288
Three Musicians, 402	of the Animals, 194, 195	The School of Athens, 287 , 287–288
picture plane, 56	Praxiteles, Hermes with the Infant	Rauschenberg, Robert, Bed, 442,
Pictures of Chocolate, Action Photo 1	Dionysus, 14	442–443
(Muniz), 98, 99	prehistoric art, 8–9	Ray, Man
Pietá (Michelangelo Buonarroti), 281 ,	primary colors, 48–49	Gift, 410
281–282	printmaking, 100	Le Souffle, 121, 121
Pink Accent (Kandinsky), 54–55,	contemporary approaches to,	Reading Photographic Establishment
55, 421	112–113	(Talbot), 115, 115
Pisano, Nicola, The Annunciation and the	intaglio, 103–107, 104, 106	Realism, 338, 358–361
Nativity, 266	Japanese prints, 385	<i>Red/Blue</i> (Kelly), 56 , 57
Pissarro, Camille, <i>La Place du Théâtre</i> ,	lithography, 107–108, 108	red chalk, 81
365, 365	prints vs. posters, 109–110	Redon, Odilon, Roger and Angelica, 82
Pixar, 140–142, 142	relief, 101–103	Red Room (Harmony in Red) (Matisse),
Place du Théâtre, La (Pissarro), 365, 365	silkscreen, 111 , 111–112	396, 396–397
placement, 57–58	unique prints, 112	Reeves, Bill, 142
plastic, 187	prints	Reformation, 100, 296
Plato, 219	Japanese, 385	registration, 103
Pleasure Pillars (Sikander), 471-472, 472	posters <i>vs.</i> , 109–110	reinforced concrete, 177–178
Plenty's Boast (Puryear), 466, 467	unique, 112	relief printmaking, 101–103
plotters, 134	Prometheus Bound (Rubens, Snyders),	relief sculpture, 147–148
pointed arch, 174	60–61, 61, 62	Rembrandt van Rijn, 326–328
Pointed Arches in Gothic Style	proofs, 113	The Artist in His Studio, 38, 38
example, 174	proper registration, 103	Christ with the Sick around Him,
Pointillism, 381–382	Prophet Jeremiah (Saint Pierre, south	Receiving the Children, 106, 107
Pollice Verso (Thumbs Down) (Gérôme),	portal), 258	Jacob Blessing the Songs of Joseph, 328
363, 363	proportion, 62–69	Self-Portrait, 329
Pollock, Jackson	Proposition, The (Leyster), 324, 325	Self-Portrait as a Young Man, 326
action painting and, 430-432	Provence of Ritual: Baptism (Bearden),	Sortie of Captain Banning Cocq's
Number 1, 432	98, 98	Company of the Civic Guard (Night
photo, 432	Puberty (Munch), 392, 392	Watch), 327
pollution, ancient art and, 210–211	pueblos, 171	Woman at a Window, 85, 85
Polykleitos, Doryphoros, 224, 226	Purification of the Temple (El Greco),	Renaissance, 2, 338
Pomona (Cameron), 115–116, 116	306, 307	anatomy and, 277–278
Pop architecture, 446–447	Puryear, Martin, Plenty's Boast, 466, 467	Early Renaissance painting, 274–279
Pop art, 443–445	Pyramid of Kafre, 210	genre subject matter, 300–301
porcelain, 187	Pyramid of the Morning Star, Warrior	Giotto and, 269
Portal Gates (Paley), 199, 199	Columns, Toltec (Tula, Mexico),	gold and, 295–296
Portal of Palazetto Zuccari, 58	251, 251	High Renaissance, 279–288,
Portrait of Madame Ingres (Ingres), 77, 77		290–291
Portrait of Paulina Borghese as Venus	Q	idea of, 270–271
Victorious (Canova), 344–346, 345	Qin Dynasty of China, 217–218	Northern Renaissance, beginning
Portrait of Sir Thomas More (Holbein), 297	Queen Nefertari presenting offerings (tomb	of, 291–297
positive form, 57 post-and-lintel construction, 172, 172	of Nefertari, Egypt), 217	Northern Renaissance, darker side, 297–300
=	Queen Nefertiti, 215, 215	printmaking and, 100
posters, prints vs., 109–110 Postimpressionism, 364, 380. See also	Quetzalcoatl, 295	sculpture and architecture, 271–273
Impressionism	quill pens, 83	time line, 268
Cézanne, 388–389	quilting, 194	in Venice, 288–290
Gauguin, 382–383	R	Renoir, Pierre-Auguste, 373–374
Japonisme, 384–385		La Loge, 31–32, 32
Seurat and Pointillism, 381–382	radial balance, 59–60	Le Moulin de la Galette, 374, 381
Toulouse-Lautrec, 380–381	Radiator Building—Night, New York	repetition, 62
van Gogh, 383–388	(O'Keeffe), 426–427, 427	Repetition (Hesse), 448 , 448–449
Postmodern art, 461–462	Radioactive Cats (Skoglund), 125–126, 126, 463–464	resolution, 136
	120, 405-404	

restoration, 284–285	Prometheus Bound, 60-61, 61, 62	Scharf, Kenny, Closet, No. 7, 152, 152
Resurrection (Grünewald), 298, 298-299	Self-Portrait with Isabella Brant, 321	Schnitt mit dem Küchenmesser Dada
Return from Cythera (Watteau), 335,	Rude Descending a Staircase, The	durch die erste Weimarer
335–337	(cartoon), 409	Bierbauchkulturepoche Deutchlands
Reynolds, Sir Joshua, Mrs. Siddons as the	Rue Transnonain (Daumier), 358–359, 359	(Höch), 122
Tragic 'Muse, 340	Running Fence (Christo), 454, 454	Schongauer, Martin, Saint Anthony
rhythm, 62–63	Ryoanji Zen Temple, 191, 191	Tormented by Demons, 104, 104
	Rydanji Zen Temple, 171, 171	
Rietveldt, Gerrit, Schröeder House	S	School of Athens, The (Raphael), 287,
(Utrecht, Netherlands), 423, 423		287–288
Rigaud, Hyacinthe, Louis XIV, 331	Saar, Alison, House of Gris Gris,	School of Katsushika Hokusai, 40
Rime of the Ancient Mariner, The	468, 468	Schröeder House (Utrecht, Netherlands)
(Coleridge), 103	Saar, Betye	(Rietveldt), 423, 423
Rime of the Ancient Mariner, The (Doré),	House of Gris Gris, 468, 468	Schust, Florence, 205
103, 103	The Liberation of Aunt Jemima,	Schwedagon Pagoda (Rangoon, Myanmar),
Rist, Pipilotti, 133	16, 16	222, 222
Selfless in the Bath of Lava, 66, 67	Sacrifice of Isaac, The (Brunelleschi),	Scofidio, Ricardo, Blur Building,
Sip My Ocean, 132–133, 133	271, 271–272	185, 185
Rivera, Diego, The Making of a Fresco,	Sacrifice of Isaac, The (Caravaggio), 45	Scott, Sir Walter, 351
Showing the Building of a City,	Sacrifice of Isaac, The (Ghilberti), 271,	sculpture, 146. See also ancient empires
90, 91	271–272	constructing, assembling, 159–160
rock art, 10	sacrilege, religious images and,	contemporary approaches to,
Rococo, 302, 334–337	241–244	160–161
Rodin, Auguste, 120–121, 377–380	Saint Anthony Tormented by Demons	Earth Art, 152–155
The Gates of Hell, Paola and	(Schongauer), 104, 104	Greek, 223–228
Francesca, 379	Sainte Chapelle (Paris, France), 263 ,	installations, 151–152
The Gates of Hell, The Thinker, 380	263–265	kinetic, 148–150
Walking Man, 155, 155		methods of, 155–158, 156
_	Sainte-Madeleine (Vézelay, France), 173	
Roger and Angelica (Redon), 82	Saint Eustace Hunting, Life of Saint	Neoclassical, 344–346
Rogers, Richard, Georges Pompidou	Eustace, Chartres Cathedral, 264	performance art, 150–151
National Arts and Cultural Center,	Saint Francis Preaching to the Birds	relief, 147–148
451 , 451–452	(Berlinghieri), 266–267, 267	Renaissance, 271–273
Roman Empire, 50–52, 228–237,	Saint Mark (Donatello), 273, 273	in the round, 148
239-241, 342. See also faith;	Saint Paul's Cathedral (London) (Wren),	Seagram Building (New York City) (van
individual works of art	339, 340, 340	der Rohe, Johnson), 177, 177
Romanesque style, 257–261	Saint Peter's Basilica (Rome) (Bernini,	Seasons: Summer, The (Johns), 89, 89
Romanticism, 34, 338, 346–354	Bramante, Michelangelo),	Seated Buddha Preaching the First Sermon,
Hudson River School, 357–358	179–181, 180, 181	254, 254
Neoclassicism and, in academic art,	Salgado, Sebastião, Gold Mine, Serra	Seated Male with a Lance (Mali), 157, 157
362–363	Pelada, State of Para, Brazil,	Seattle Public Library (Koolhaas),
Orientalism and, 354–356	125, 125	465, 465
Rompers (Odani), 470, 470	Salons, 359, 360, 365–368	secondary colors, 48-49
Romulus and Remus (Calder), 40-41, 41	Samaras, Lucas, Phantasmata, 463, 463	secondary symbolism, 293
Room of the Newlyweds (Mantegna),	Samuelson, Alex, Coca-Cola logo,	Selfless in the Bath of Lava (Rist), 66, 67
274, 275	28–29, 29	Self-Portrait as a Young Man (Rembrandt),
rose window (Notre Dame Cathedral)	Sand Mandala (Drepung Loseling	326, 326
(de Chelles), 13	Monastery, India), 97, 97	Self-Portrait as Soldier (Kirchner),
Rothko, Mark, Green on Blue, 433,	sanguine, 81	410–411, 411
433–434	San Miniato al Monte (Florence, Italy),	Self-Portrait (Dürer), 294, 294
rotunda, 233	265, 265	Self-Portrait in a Convex Mirror
round arches, 172–173		
	Santo Domino de Guzman (Oaxaca,	(Parmigianino), 303
Round Arch example, 172	Mexico)	Self Portrait (Kollwitz), 80, 80
round arch example, 172	Chapel of the Rosary, 316	Self-Portrait (Rembrandt), 329
Royal Pavilion at Brighton (Nash), 354 ,	interior, 316	Self-Portrait (van Gogh), 387, 387
354–355	San Vitale, 245 , 246 , 247	Self-Portrait with Isabella Brant (Rubens),
Rubens, Peter Paul, 318–322	saturation, 48	321, 321
Arrival of Marie de' Medici at	Saxons, 248	Self-Portrait with Model (Kirchner),
Marseilles, 321	scale, 62–69	393, 393
The Elevation of the Cross, 320	Scene in Yoshivara (Utamaro),	serpentinata, 304
Garden of Love, 322	384–385, 384	Serra, Richard, Tilted Arc, 68-69, 69

Seurat, Georges-Pierre, 381-382 Solomon R. Guggenheim Museum Supper at Emmaus, The (Caravaggio), 308 L'écho, 44, 45, 83 (New York City) (Wright), Surrealism, 390, 413-417 425, 426 Sussman, Eve, 89 Seconds at Alcázar, A Sunday on La Grande Jatte, 381 sfumato lighting, 4, 297 Sortie of Captain Banning Cocq's Company 470, **471** shadow, 44-46 of the Civic Guard (Night Watch) Sutherland, Ivan, 134-135, 135 Shamsa, **59**, 59-60 (Rembrandt), 326, 327 Swarm Sketch (Edmunds), 143, 143 shape, 40-43 Sosus, Unswept Dining Room Floor, 235, Swing, The (Fragonard), 336 235-236 shaped canvases, for painting, 97 Syjuco, Stephanie, 137, 137-138 Sheep Piece (Moore), 46, 46 symmetrical balance, 59 Souffle, Le (Ray), 121 Sheikh Zayed Bridge (Hadid), 184, Soufflot, Jacques Germain, Pantheon, symmetry, 59-60 184-185 62-63, 63 Synthetic Cubism, 402 Sherman, Cindy, Untitled, 126-127, 127 Synthia (Leeson), 144 space, 38 Shiva Nataraja, Lord of the Dance, Spain, Baroque period, 317–318 Sze, Sarah, Corner Plot, 36, 37 255, **255** Spiral: An Ordinary Evening in New Haven Т shock value, art and, 16-17 (Bartlett), 49, 49 Shoot (Burden), 457-461, 460 Spiral Jetty (Smithson), 152-153, Table Clock (Brandt), 204, 204 **153**, 453 shutters, 116 Tableau (Mondrian), 421-422, 422 Siddhartha Gautama, Prince, 221 Spirited Away (Miyazaki), 140-141, 141 tactile texture, 46 Sikander, Shahzia, Pleasure Pillars, Spirit of the Dead Watching (Gauguin), Taj Mahal (Agra, India) (Nash), 471–472, **472 382,** 382–383 354-355, 355 silhouettes, 86 stabiles, 436 Talbot, William Henry Fox, Reading silkscreen printmaking, 111, 111–112 Starry Night, The (van Gogh), 387, Photographic Establishment, 387-388, 388 silkscreen process, 111 115, **115** simultaneous colors, 53 Statue for Vietnam Veterans Memorial Tansey, Mark, Triumph of the New York simultaneous contrast, 53 (Hart), 19, 19 School, 440-441, 441 Sip My Ocean (Rist), 132-133, 133 steel frame construction, 176-177, 177 Taos Pueblo (Taos, New Mexico), Siquieros, David, Echo of a Scream, 66, Steerage, The (Stieglitz), 120, 120 171, **171** 70, 70 Steichen, Edward Tassi, 310-311 Sistine Chapel Constantin Brancusi in His Studio, 147 Taylor, Maggie, 136, 137 ceiling (Michelangelo), 283, Le Penseur, 120, 120-121 Teabowl (Ichinyû), 190 283-285, 284 stencils, 111 tea ceremony, 190 stick charcoal, 80 The Last Judgment (Michelangelo), 290 tempera panel, 90-91 Stieglitz, Alfred, The Steerage, 120, 120 restoration, 285 Tempietto (Bramante), 60, 60 SITE (Sculpture in the Environment), Temple I, Maya (Takal, Guatemala), 250, stigmata, 298 450-451, **451** Still Life with Apples (Cézanne), 388, 389 250-251 Six Pillows (Dürer), 83 Still Life with Chair-Caning (Picasso), 401 Temple Mount (Jerusalem), 164-165 Sketchpad (Sutherland), 134-135, 135 stoicism, 224-225 Temple of Ramses II (Abu Simbel, Egypt), stone architecture, 172-174 Skoglund, Sandy, Radioactive Cats, **216,** 216–217 125–126, **126**, 463–464 Stonebreakers (Courbet), 359-360 \$10 bill (New Zealand), 29, 29-31 Sky Cathedral (Nevelson), 159, stone carving, 158 Tenebroso, 310-311 159-160 Stonehenge, 210 Ten Leaves from a Koran with Kufic Slave Ship (Slavers Throwing Overboard the stoneware, 187 Script, Abbasid Caliphate, 241, 241 Dead and Dying, Typhoon Coming Store Days (Oldenburg), 445 terra-cotta, 155 On) (Turner), 348, 348 straight photography, 117-120, 428. See Terra-cotta army of First Emperor of Sluter, Claus, The Well of Moses, 291, also photography Qin (Lintong, Shenxi, China), 291-293 Studio: Seven Months of my Aesthetic 217-218, 218 Smith, David, Cubi XII, 159, 159, Education (and then some) (Oursler), texture, 46-47, 80 437-438 35, 35 The Agony in the Garden (El Greco), Smith, Kiki, Peabody (Animal Drawings), Studio Craft Movement, 196-200 307, 307 113, 113 Studio of a Painter (Courbet), 34, 34-35 theft of art. 3 Smithson, Robert, Spiral Jetty, 152-153, stupa, 221 Theodora and Attendants, 246, 249 **153,** 453 subtractive sculptural methods, 155 Theotokopoulos, Domenikos. Snag, Point Lobos (Weston), 428, 428 Sultan Muhammad, The Court of see El Greco Snow Storm: Steam-Boat off a Harbour's Gayumars, 72, 72 Therrien, Robert, Under the Table, 66, 67 Mouth (Turner), 93, 93-94 Sun, The (Chihuly), 200, 200-201 Thinker, The (Rodin), 120-121 Snyders, Frans, Prometheus Bound, 60-61, Sunday on La Grande Jatte, A (Seurat), Third of May, 1808, The (Goya), 346, **61,** 62 **381,** 381–382 346-347 Socrates, 219 Sun Tunnels (Holt), 153, 154-155 30 Are Better Than One (Mona Lisa)

Superrealism, 449-450

(Warhol), 33, 33

Soft Toilet (Oldenburg), 445, 445

three-dimensional shapes, 46	U	van Rijn, Rembrandt. see Rembrandt
three-dimensional space, 38	Überorgan (Hawkinson), 467, 467	van Rijn
Three Goddesses, 223, 223	Uelsmann, Jerry, Meditation Mystery,	Various Stages of Making a Color Print
Three Musicians (Picasso), 402	127, 127	(Utagawa), 102 , 102–103
Three Skulls (Cézanne), 94, 94	Ukiyo-e, 384–385	Vasari, Geiorgio, 280–281
Three Studies of a Youth (Watteau), 81, 81	underpainting, 93	Vase (Tiffany), 191, 192
Throne of Saint Peter (Bernini), 314	Under the Table (Therrien), 66, 67	vectorscopes, 134
throwing, 188	Unique Forms of Continuity in Space	Velázquez, Diego, Meninas, Las, 317,
Tibetan monks, mandalas and, 97	(Boccioni), 406	317–318, 318
Tide Table (Kentridge), 85-86, 86	United Nations Educational, Scientific,	Venice, Renaissance in, 288–289
Tiffany, Louis Comfort, Vase, 191, 192	and Cultural Organization	Venturi, Robert, Fire Station #4, 446,
tiling, 235–236	(UNESCO), 167, 207, 211	446–447
Tilted Arc (Serra), 68–69, 69	United States Capitol (Washington,	Venus de Milo, 226, 226
time	D.C.) (Latrobe), 183	Venus of Urbino (Titian), 288–289, 289
architecture and, 179-183	United States Pavilion, EXPO 67 (Fuller),	Venus of Willendorf, 8
as medium, 129-133	43, 43	Veranda Post of Enthroned King and Senior
Tinguely, Jean, Homage to New York,	unity, 61–62	Wife (Opo Ogoga) (Olowe of Ise),
150, 150	Unkei, Kongorikishi (Guardian King),	399, 399
Tintoretto, The Last Supper, 304-306, 305	158, 158	Vermeer, Jan, Young Woman with a Water
Titian, Venus of Urbino, 288-289, 289	Unswept Dining Room Floor (Sosus), 235,	Jug, 322–323, 323
Tolstoy, Leo, 19	235–236	Versailles. see Palace of Versailles (France)
Toulouse-Lautrec, Henri de, 380–381		Vesalius, "The Muscle System," 278, 278
Divan Japonais, 109, 109–110	Utamaro, Kitagawa, Scene in Yoshivara, 384–385, 384	video
Miss Loie Fuller, 108, 108	Untitled (Calder), 149	digital, 138–139
At the Moulin Rouge, 380		video art, 131–133
transept, 260	Untitled (Donovan), 62, 62	Vietnam Veterans Memorial (Lin),
transformation, by art, 21–23	Untitled Ice Bucket (Voulkos), 196, 196	17–18, 18
Trans World Airlines Terminal, Kennedy	Untitled (Judd), 447 , 447–448	View of an Ideal City (della Francesca), 73
Airport (New York) (Saarinen),	Untitled (Sherman), 126–127, 127	73, 74
177–178, 178	Untitled (We don't need another hero)	View on the Catskill, Early Autumn (Cole)
Treachery of Images, The (Magritte),	(Kruger), 111, 111	357, 357
415–417, 417	Urban Landscape (Zhan), 21 , 21–22	Vigée-Lebrun, Marie Louise Élisabeth,
Triumph of the New York School (Tansey),	urban planning, 183–184	The Artist and Her Daughter,
440–441, 441	Utagawa, Kuniyoshi, Various Stages	337, 337
trumeau, 257	of Making a Color Print, 102 ,	Villa Rotonda (Palladio), 289 , 289–290
tumi (daggers), 192	102–103	Villa Savoye (Poissy, Ile-De-France,
Turner, J.M.W., 348	V	France) (Le Corbusier), 424 , 425
Slave Ship (Slavers Throwing Overboard	value, as element, 44–46	vine charcoal, 80
the Dead and Dying, Typhoon	van der Rohe, Ludwig Mies, Seagram	Viola, Bill, 131–132, 132
Coming On), 348	Building (New York City),	Violin and Palette (Braque), 74 , 74–75
Snow Storm: Steam-Boat off a Harbour's	177, 177	Virgin of the Rocks, The (Leonardo da
Mouth, 93 , 93–94	van der Weyden, Rogier, Head of the	Vinci), 279–280, 280
Turrell, James, <i>Atlan</i> , 44–46, 45 , 453	Virgin, 76, 77	Virgin with the Canon van der Paele, The
tusche, 107	van Dongen, Kees, Modjesko, Soprano	(van Eyck), 47, 47 , 48, 293
Tutankhamen, tomb of, 215–216	Singer, 54, 54	visual weight, 59
Chest of Tutankhamen with Hunting and	van Eyck, Jan	Vitruvian Man (Leonardo da Vinci), 64, 64
War Scenes, 64–65, 65	Giovanni Arnolfini and His Bride,	Vitruvius, 64
second coffin, 216	91–92, 92 , 292 , 293, 293	Vollard, Ambroise, 399
TV Buddha (Paik), 131, 131, 469	The Virgin with the Canon van der	volume, 41
Twilight in the Wilderness (Church),	Paele, 47, 47, 48, 293	volutes, 170
357–358, 358	van Gogh, Vincent, 383–388	Voulkos, Peter, Untitled Ice Bucket,
Tivo Calla Lilies on Pink (O'Keeffe),		196, 196
63, 63	Fishing Boats at Sea, 39, 39	170, 170
two-dimensional shapes, 46	Hill with the Ruins of Montmajour,	W
two-dimensional space, 38	84, 84 The Night Cafe 386	= =
	The Night Cafe, 386	wabi, 190
Two Girls on the Banks of the Seine	The Potato Eaters, 383	Walker, Kara, Gone: An Historical Romand
(Courbet), 367, 367	Self-Portrait, 387	of Civil War as it Occurred Between
type design, 138	The Starry Night, 387, 388	the Dusky Thighs of Young Negress
typography, 202–203	vanishing point, 73	and Her Heart, 87, 87

Walking Buddha, 254, 255 Walking Man II (Giacometti), 64, 65 Walking Man (Rodin), 155, 155, 379 Wanderer über dem Nebelmeer (Friedrich), 347-348, 348 Wang, Zhan, Urban Landscape, 21, 21-22 Warhol, Andy, 443-445 Gold Marilyn Monroe, 444 Orange Disaster, 444 30 Are Better Than One (Mona Lisa), 33, 33 warm colors, 49 warp, 194 Warrior Columns, Toltec (Tula, Mexico), 251, 251 watercolor painting, 94-95 Waterfall (Escher), 75, 75 Watteau, Jean Antoine, 335-337 Return from Cythera, 335 Three Studies of a Youth, 81, 81 weaving, 193-194 Webster, Sue, Kiss of Death, 160, 160 Well at the World's End, The (Morris), 202, 202 Welling, James, New Abstraction (Untitled, no. 25), 57 Well of Moses, The (Sluter), 291, 291-293 Well Scene (Hall of the Bulls) (Lascaux?), 9

Weston, Edward Pepper 30, 121, 121 Snag, Point Lobos, 428, 428 Whistler, James Abbott McNeill art criticism and, 376-377 Nocturne in Black and Gold: The Falling Rocket, 376 Whiteread, Rachel, House, 21, 21-22 Wines, James, 450-451 wireframes, 142 Woman and Bicycle (de Kooning), 31, 31-32, **32** Woman at a Window (Rembrandt), 85, **85,** 326 Woman at her Toilette (Morisot), 374-375, **375** women, censorship and, 458-459 "Wonders of the World," 167-168 wood, decorative arts, 195-196 wood architecture, 174-175 wood carving, 157-158 woodcut prints, 101 woodcut relief process, 100 wood engraving, 103 Woo (Oursler), 160, 160-161 World War I, 390, 406-407 Wrapped Coast (Christo, Jeanne-Claude), 454-455

Wreck of the Hope, The (Friedrich), 50–52, **52**Wren, Christopher, Saint Paul's Cathedral (London), 339, 340, **340**Wright, Frank Lloyd, 425
Kaufman House (Fallingwater) (Pennsylvania), **162**, **163**, 163–164, **164**Solomon R. Guggenheim Museum (New York City), **426**wrought metalwork, 192
Wu Chen, Bamboo in the Wind, 85, **85**Wyeth, Andrew, Christina's World, 91, **92**"WYSIWYG," 138

Y

Yakshi, The Great Stupa (Sanchi, India), 221–222, **222, 225,** 225–226 Yardbirds, The Doors, The (Maclean), 110, **110** Yin/Yang Symbol, **58,** 59 Yo (Butterly), 200, **200** Young Woman with a Water Jug (Vermeer), 322–323, **323**

Z

Zuccaro, Federico, 304